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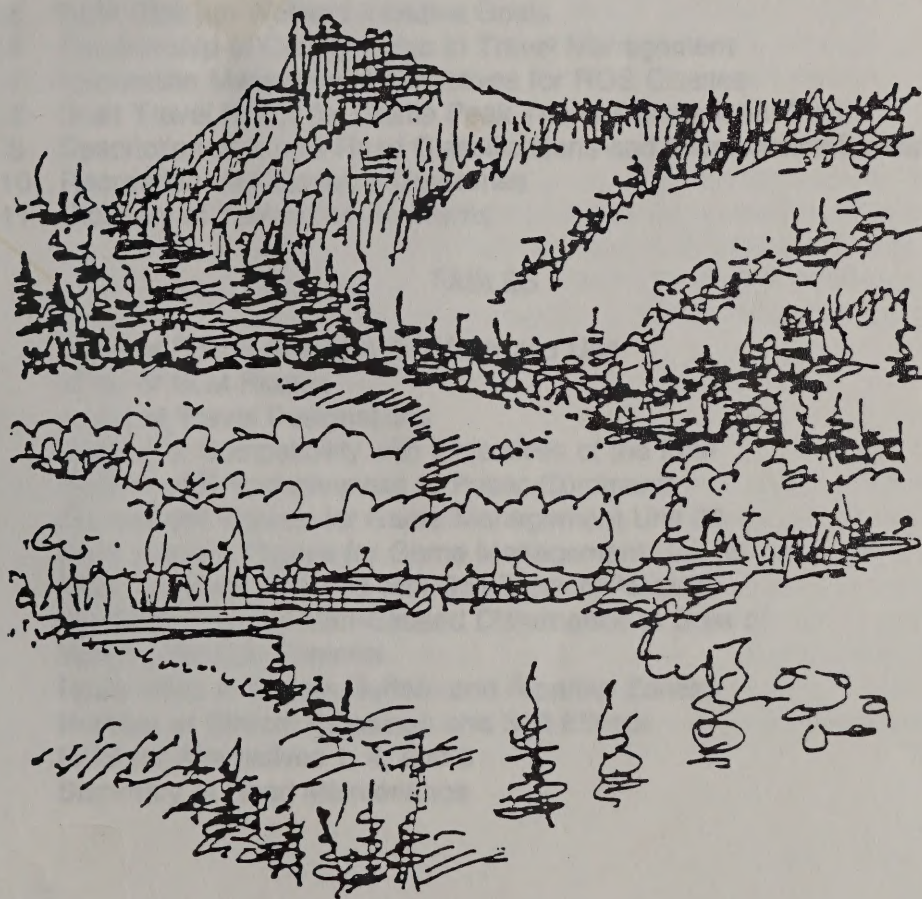
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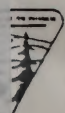
Getting Around in the
Castle Peak Area
Today and Tomorrow...

Eagle County, Colorado

**FINAL
TRAVEL MANAGEMENT PLAN**



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1997



Department of the Interior
Bureau of Land Management
Glenwood Springs Resource Area
(5/97)

**CASTLE PEAK TRAVEL MANAGEMENT PLAN
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Chapter 1

INTRODUCTION

Purpose and Need

The purpose of this Castle Peak Travel Management Plan and Environmental Assessment is to protect resource values and improve the health of the land, while continuing to provide a variety of motorized and non-motorized recreational opportunities.

The Bureau of Land Management (BLM) prepared this document to make revisions to the Castle Peak area's current transportation system, in response to increased recreational demands and visitor use conflicts related to travel in the area. The Travel Plan includes site-specific transportation management goals and objectives, where appropriate. The Environmental Assessment (EA) identifies the resource values and conflicts currently occurring within the area, the proposed action and alternatives considered in the Travel Plan, and the environmental impacts related to the action proposed. The EA also identifies the current Resource Management Plan (RMP) decisions that are changed in the Travel Plan. An amendment to the RMP will be completed to support changes in the RMP's travel management decisions.

Where is the Castle Peak Planning Unit?

The planning unit includes all BLM lands north of the Eagle River, east and south of the Colorado River, and west of State Highway 131. The planning unit boundary is the same as that of the Colorado Division of Wildlife (CDOW) Game Management Unit 35, and is bordered by the population centers of Eagle, Gypsum, Dotsero, Burns, McCoy, Bond, and Wolcott. The planning unit totals 170,809 acres of land, of which 119,582 acres is administered by BLM; 49,621 acres is in private ownership; and the remaining 1,606 acres are owned by the State Land Board.

What is travel management?

Travel management is the process of providing adequate access for visitor use and administration of BLM lands, regulating travel to protect public safety, preventing damage to resources, and resolving conflicts among users. Following the RMP approval, typically a Resource Area-wide transportation plan is prepared that includes existing and proposed roads and trails available for public land visitors. BLM roads and trails are open to public land visitors for motorized and non-motorized travel, but are subject to discretionary restrictions, if needed, to protect public health and safety or preserve natural resources. These discretionary restrictions are normally made through OHV designations, but can also be enforced through closures, barriers, alternate routes, and visitor information.

Background

For the past 3 years BLM has monitored and reviewed travel management uses and trends within the Glenwood Springs Resource Area. A travel assessment report in 1994 identified travel issues and ongoing problems throughout the Resource Area (BLM, 1994). Based on this report, BLM initially decided to prepare a travel management plan for the entire Resource Area. However, with decreasing budgets, a plan for the entire Resource Area could not be funded adequately or completed in a timely manner.

BLM made an alternate decision to prepare plans for smaller geographic areas, those with multiple-user problems, resource damage, and discrepancies in the current travel management rules. The Castle Peak Area was selected because of its homogeneity as a landscape unit; motorized and non-motorized use conflicts, particularly during big game hunting season; and motorized use within the Castle Peak and Bull Gulch Wilderness Study Areas. A travel management plan specific to the Castle Peak Area also offered the opportunity to coordinate and complement travel issues raised in Eagle County's Eagle River Management Plan, Eagle Area Community Plan, and the Eagle County Master Plan. In the future, similar travel management plans will be prepared on geographic, landscape-based areas.

What has been the travel management policy for the Castle Peak area?

While there has been no travel management plan specific and unique to the Castle Peak Area before now, the RMP has required acquiring legal access into areas of public lands where legal access does not exist; using and improving roads and trails, where feasible; and constructing new roads and trails to meet the needs of public land visitors.

The Castle Peak Area contains a total of about 404 miles of routes for motorized travel, including approximately 288 miles of roads on BLM lands, 48 miles of county roads, and 68 miles of State and Federal highways. There are also about 32 miles of non-motorized trails on BLM lands. The current road and trail inventory for BLM lands is being updated, and the mileage will likely increase as a result. Most of the existing roads and trails on BLM lands are not included in the existing transportation plan or maintenance program (see Appendix 1, Summary of Existing Roads and Trails by Geographic Area).

Vehicular public access is available at ten major access points surrounding the planning area, and most of the visitors gain access at these points. Many other roads enter BLM lands from private property, which provide vehicle access not generally available to the public. There has been objection to the use by private landowners of motorized vehicles on some of these roads, particularly those on the north side of Castle Peak. These visitors support either closing these roads to everyone or providing vehicle access on these roads to everyone.

There are 32 miles of non-motorized trails which provide hiking and horseback access to public lands in both motorized and non-motorized portions of the planning unit. These trails are well established but non-maintained, contain segments which have become overgrown or blocked by downed timber, and are difficult to locate at times.

Conformance with Land Use Plan

The Glenwood Springs Resource Management Plan (RMP) was prepared in 1984, amended in 1991 for oil and gas leasing, and amended again in 1997 to incorporate land health standards and guidelines. The RMP describes management objectives along with the resource allocations and, in general terms, the management actions needed to achieve the objectives. Some of the alternatives being considered will require changes to the current travel restrictions. Increasing conflicts between motorized and non-motorized users, travel designations that conflict with BLM's Interim Wilderness Management Policy (IMP), and increasing resource damage to soils, wintering wildlife, and the visual landscape all require changes in travel management decisions. BLM's Land Health Standards (see Appendix 2) further support the need to review and revise the RMP decisions in the planning unit.

The current RMP decisions provide the basis for Alternative 1 (Current Management), the "No-Action" alternative as described in Chapter 2. Alternative 5 (Revised Proposed Action) represents the framework for changes in the RMP decisions based on the analysis and recommendations presented in this plan (see Appendix 3, Current and Proposed RMP Travel Management Decisions, for more details).

What types of decisions will be made in the plan?

Two types of decisions will occur with the approval of the Castle Peak Travel Management Plan/EA. The decisions will outline 1) general management intent, such as the new travel designations, and 2) site-specific actions, such as identifying specific road closure points or depicting road maintenance standards for specific road segments. The proposed RMP Decisions (see Appendix 3) represent broad, general allocations related to Transportation, Recreation and OHV Designations that would be adjusted with the plan's approval. The activity or project-level decisions would focus on projects necessary to implement the new plan.

What about future changes to the plan?

Where feasible, Plan decisions have been stated in a "performance-based" manner, so that restrictions on travel may be adjusted if anticipated impacts or expected outcomes are not occurring. In the future, maintenance changes could be made as modifications of the Plan.

What about protests and appeals?

The BLM's regulations on protests and appeals differ with RMP decisions and activity or project-level decisions. Protests of RMP decisions are reviewed and final decisions made by the BLM Director; activity or project-level actions to implement the RMP decisions are appealable to the Interior Board of Land Appeals. Only the proposed RMP amendment (see Appendix 3) will be protestable to the BLM Director. The protest and appeal period (30 days) for these two types of decisions will begin with the approval of the decision record of the Castle Peak Travel Management Plan/EA.

Relationship to Statutes, Regulations and Other Plans

The recently-adopted Eagle River Management Plan (ERMP) approved by Eagle County has specific references to travel in and near the Eagle River corridor. This Castle Peak Travel Management Plan incorporates the ERMP recommendations (see Appendix 4) that relate to travel management.

An Eagle Area Community Plan (EACP) is being prepared for the Town of Eagle and Eagle County to serve as a guiding document for future land use decisions, particularly those involving land use adjacent to Eagle. Draft recommendations of the Eagle Area Community Plan, particularly those related to travel management, are presented in Appendix 6 and further support the objectives outlined for this Castle Peak Travel Management Plan.

The Eagle County Master Plan, approved in 1996, outlines guiding policies that directly pertain to travel management on public lands in the Castle Peak area. The guiding policies listed in Appendix 6 also substantiate the goals, objectives, and recommendations of this Castle Peak Travel Management Plan.

NEPA Compliance

This EA will serve as the NEPA document for the actions presented in this plan. At the time projects are implemented, administrative determinations (ADs) will be made to assess whether further NEPA analysis is necessary. If this EA does not adequately analyze the impacts of a future implementing action, supplemental NEPA document(s) would be prepared.

Chapter 2

GOALS AND OBJECTIVES

The primary goal of this Castle Peak Travel Management Plan is to protect land and resource values, while continuing to provide a variety of motorized and non-motorized recreational opportunities. The objectives below have guided of alternatives for this plan and provide a basis for comparing the alternatives. The alternative which best meets these objectives will be implemented by the BLM (see Chapter 3 for a comparison of alternatives).

These objectives were identified based on the current Resource Management Plan and public comments received prior to development of the Proposed Action (Alternative 4) and the Revised Proposed Action (Alternative 5).

1. Manage the Castle Peak, Bull Gulch, and Pisgah Mountain areas to maintain or enhance non-motorized recreation opportunities. These areas currently have limitations on motorized travel (RMP, 1984). An alternative that restricts motorized travel in these areas would be rated with a high degree of compatibility with this objective.
2. Manage the remaining public lands in the Castle Peak area for motorized recreation opportunities. These lands currently have no limitations on motorized travel (RMP, 1984). Any alternative with few limitations on motorized travel outside the areas listed in Objective 1 would be rated with a high degree of compatibility with this objective.
3. Identify a system of designated roads and trails to access all lands in the Castle Peak Area, consistent with motorized or non-motorized recreation management objectives. An alternative that establishes a system of routes available for use would be rated with a high degree of compatibility with this objective.
4. Consider seasonal changes to travel restrictions to improve the quality of hunting on public lands and to protect scarce species. An alternative that employs seasonal restrictions to accomplish better hunting, scarce species, or other resource protection would be rated with a high degree of compatibility with this objective.
5. Protect the Wilderness Study Areas consistent with BLM's interim wilderness management policy. Alternatives must close the WSAs to motorized and mechanized vehicle use, including snowmobiles and mountain bicycles, to be rated with a high degree of compatibility with this objective.
6. Provide opportunities for off-highway vehicle (OHV) use, including four-wheel vehicles, ATVs, and motorcycles, for moto-cross, trail riding, and hill climbing in a setting designed and promoted for such uses. Any alternative that maximizes the area available for intensive OHV use would be rated with a high degree of compatibility with this objective.
7. Provide equal access opportunities to public lands for the public and adjacent landowners. An alternative that limits motorized use of access routes from private lands to public lands, unless those same routes are open to the public, would be rated with a high degree of compatibility with this objective.

8. Manage travel within areas designated for motorized travel to protect fragile soils that are highly prone to erosion, maintain water quality, and protect critical winter wildlife habitat. An alternative that minimizes motorized use on routes in critical habitat areas, on erosive soils, or in important viewsheds, or that employs seasonal restrictions to accomplish plan objectives, would be rated with a high degree of compatibility with this objective.

9. To provide a complete and easy-to-use map which clearly shows public lands and any restrictions on their use by the public.

10. To identify some options to increase BLM presence in the area through more regular patrols to provide public information and enforce regulations.

11. Identify public lands blocked by private lands and determine priorities for acquiring public access if appropriate.

Chapter 3

DESCRIPTION OF ALTERNATIVES

This chapter describes the travel management alternatives for public lands in the Castle Peak area. In July, 1996, BLM presented three alternatives (Alternatives 1, 2, and 3) for public review. In September, 1996, a Proposed Action (Alternative 4) was prepared and distributed for comment. After reviewing nearly 100 comments and completing more analysis of available data, BLM further revised the Proposed Action. This revised alternative is depicted as Alternative 5 (Revised Proposed Action) and is the BLM's Preferred Alternative.

State and federal highways totalling 68 miles and 48 miles of Eagle County roads are within the planning area. These roads are depicted in the transportation system, described in the narrative, and shown on maps because they provide direct and indirect access to public lands.

Alternative 1 (Continuation of Current Management)

Alternative 1 (see Map 1) depicts the current or existing travel designations as outlined in the 1984 Resource Management Plan. Chapter 4, Affected Environment, describes current management in greater detail. Alternative 1 provides a basis from which Environmental Effects (see Chapter 5) will be measured

Under Alternative 1, travel management would emphasize motorized access with minimal restrictions. Approximately 288 miles of existing BLM roads and trails would be available for motorized travel and 32 miles of routes would be available for non-motorized travel (see Map 2). Under current management 73,936 acres in the Black Mountain, Bor Flats, Horse Mountain, Hells Pocket, Big Red Hill, Greenhorn Mountain, and Gypsum Hills areas would be open for all types of vehicle use, including on and off roads and trails, 15,679 acres in the Pisgah Mountain and Windy Point areas would be available for motorized travel on existing roads; and 20,128 acres in the Castle Peak and Domantle areas would have travel limited to designated routes. This alternative would accommodate present and future demand for motorized recreation opportunities and would allow the development of new roads to provide access into areas presently inaccessible.

Existing areas of intensive OHV use on 6,276 acres (included in the 73,936 acres, shown above, open for all types of vehicle use) in the Gypsum Hills, Bocco Mountain, and Blue Hill areas would continue to be available and additional areas would likely be developed by users over time. No seasonal restrictions on travel would be implemented.

The north portion (9,839 acres) of the Bull Gulch Wilderness Study Area (WSA) would remain closed year-round to motorized travel, including snowmobiles. The remaining 5,362 acres in the Bull Gulch WSA, including about 9 miles of existing roads, would remain open to motorized travel, on and off road. Under current RMP designations, mechanized travel, including mountain bicycles, is allowed throughout the planning unit, including the areas closed to motorized travel.

Lands in the Castle Peak Area offer a variety of recreational opportunities. Regarding Recreation Opportunity Spectrum (ROS) classifications (see Map 3), most of the planning unit

is classified as Semi-Primitive with Motorized Access (86,619 acres). Approximately 94,329 acres (79% of the Castle Peak Area) is within 1/2 mile of a route open to motorized vehicle use (see Map 22). A relatively small portion of the Bull Gulch area is classified as Semi-Primitive with Non-Motorized Access (7,296 acres). Lands along the Colorado River, Eby Creek Road, I-70, and Highway 131 are classified as Roaded Natural (21,087 acres), Semi-Urban (4,586 acres), and Urban (1 acre).

Alternative 2

This alternative emphasizes motorized recreation on 237 miles of BLM roads, while providing 83 miles of non-motorized routes (see Map 4). A system consisting of most of the existing routes on 45,719 acres in the Black Mountain, Bor Flats, Pisgah Mountain, Windy Point, Greenhorn Mountain, Domantle, Horse Mountain, and Big Red Hill areas would be designated for motor vehicle use. Travel would also be permitted on all existing routes on 46,425 acres in the Gypsum Hills and Hells Pocket areas. New motorized travel opportunities would be provided in the Bor Flats and Black Mountain areas.

Opportunities for intensive OHV use would be provided in a managed setting on 2,448 acres near Blue Hill and Bocco Mountain (included in the 45,719 acres, shown above, open on designated routes). The intensive-OHV-use areas may include moto-cross tracks, hill-climbing areas, play areas, and dispersed motorcycle riding trails in a variety of terrain and route conditions. Intensive-OHV-use areas would be closed from December 1 to April 30 each year to protect wildlife habitat, erodible soils, and watershed values. The beginning date of the seasonal closure would be delayed to coincide with the end of late season big game hunts ensuring sufficient public access to meet Colorado Division of Wildlife harvest goals.

Travel management would protect wilderness values in the Castle Peak WSA and the entire Bull Gulch WSA by closing approximately 27,438 acres to motorized and mechanized travel, including snowmobiles and mountain bicycles.

Alternative 3

Under this alternative, to increase opportunities for non-motorized recreation and reduce conflicts between motorized travel and important wildlife habitat and watershed values, motorized travel would be permitted only on designated routes on 92,144 acres throughout the planning unit (see Map 5). Non-motorized recreation opportunities would be enhanced in the Black Mountain, Pisgah Mountain, Windy Point, Bor Flats, and Domantle areas. Approximately 223 miles of existing roads and trails would be managed for non-motorized use. Motorized travel would be permitted on 97 miles of BLM roads.

Opportunities for intensive OHV use would be provided in a managed setting on 2,145 acres in the Bocco Mountain area only (included in the 92,144 acres, shown above, open on designated routes). The intensive-OHV-use area may include moto-cross tracks, hill-climbing areas, play areas and dispersed motorcycle riding trails in a variety of terrain and route conditions. The intensive-OHV-use area would be closed December 1 to April 30 each year to protect wildlife habitat, erodible soils, and watershed values. The beginning date of the seasonal closure would be delayed to coincide with the end of late season big game hunts

ensuring sufficient public access to meet Colorado Division of Wildlife harvest goals.

Travel management would protect wilderness values in the Castle Peak WSA and the entire Bull Gulch WSA by closing approximately 27,438 acres to motorized and mechanized travel, including snowmobiles and mountain bicycles.

Alternative 4 (Proposed Action)

Under this alternative, to increase opportunities for non-motorized recreation and reduce conflicts between motorized travel and important wildlife habitat and watershed values, motorized travel would be permitted only on designated routes on 92,144 acres throughout the planning unit (see Map 6). Motorized travel would be available on 128 miles of BLM roads. Approximately 192 miles of routes would be available for non-motorized use (see Map 7).

Access to Bor Flats, Domantle, Pisgah Mountain, Windy Point, and Black Mountain would be closed to motorized travel from December 1 to April 30 of each year to mitigate impacts to wintering big game and erosive soils. The beginning date of the seasonal closure would be delayed to coincide with the end of late season big game hunts ensuring sufficient public access to meet Colorado Division of Wildlife harvest goals. Motorized access on the roads to Domantle and Little Dutton Spring, and along the Stagecoach Road on Pisgah Mountain, would be open May 1 to September 30 to provide motorized recreation opportunities during the summer, but would be closed to motorized travel from October 1 through April 30 to reduce pressure on big game, primarily mule deer, during the hunting season.

Opportunities for OHV travel would be available on all designated motorized routes in the planning unit. Enhanced opportunities for motorized recreation would be provided on 12,539 acres (included in the 92,144 acres, shown above, open on designated routes) in managed intensive OHV use areas in the Bocco Mountain and Blowout Mountain areas. All motorized travel within these OHV use areas would be open on designated routes only. In general, all existing routes in the OHV use areas would become designated routes. Possible OHV uses in the Bocco Mountain area would include moto-cross tracks and dispersed motorcycle riding trails in a variety of terrain and route conditions. Possible OHV uses in the Blowout Mountain area would include four-wheel driving, ATV riding, and dispersed motorized travel on all designated routes. Travel on single track trails would be limited to motorcycles or mountain bicycles, to preserve these trail and prevent them from becoming wider.

The Bocco Mountain OHV use area would be closed from December 1 to April 30 to protect wintering deer, erodible soils, and watershed values. The beginning date of the seasonal closure would be delayed to coincide with the end of late season big game hunts ensuring sufficient public access to meet Colorado Division of Wildlife harvest goals.

Travel management would protect wilderness values in the Castle Peak WSA and the entire Bull Gulch WSA by closing approximately 27,438 acres to motorized and mechanized travel, including snowmobiles and mountain bicycles.

Alternative 5 (Revised Proposed Action)

Under this BLM-preferred alternative, to increase opportunities for non-motorized recreation and reduce conflicts between motorized travel, important wildlife habitat, and watershed values, motorized travel would be permitted on designated routes only on 92,144 acres throughout the planning area (see Map 9). Motorized travel would be available on 180 miles of BLM roads. Approximately 140 miles of routes would be available for non-motorized travel (see Map 10).

Access to Black Mountain, Bor Flats, Domantle, Pisgah Mountain, Windy Point, Hells Pocket, and Cottonwood Creek would be closed to motorized travel from December 1 to April 30 each year to mitigate impacts to wintering big game and erosive soils (see Map 11). The beginning date of the seasonal closure would be delayed to coincide with the end of late season big game hunts ensuring sufficient public access to meet Colorado Division of Wildlife harvest goals. Use of the Stagecoach Road (5.1 miles) on Pisgah Mountain would open May 1 to September 30 to provide motorized recreation opportunities during the summer, but would be closed to motorized travel from October 1 through April 30 to reduce pressure on big game, primarily mule deer, during the hunting season, and to mitigate impacts to wintering big game and erosive soils. Use of the Horse Mountain Road (2.3 miles) north of Eagle County Road 4 would open May 1 to September 30 to provide motorized recreation opportunities during the summer, but would be closed from October 1 through April 30 to reduce watershed impacts during the wet months of fall, winter, and spring.

Opportunities for OHV travel would be available on all designated motorized routes in the planning unit. Enhanced opportunities for motorized recreation would be provided in a managed setting on 18,326 acres (included in the 92,144 acres, shown above, open to travel on designated routes) in the Bocco Mountain and Gypsum Hills areas under a Special Recreation Management Area (SRMA) designation. These areas would be managed to maximize motorized travel opportunities. Possible uses in the Bocco Mountain SRMA (1,396 acres) would include moto-cross tracks and dispersed motorcycle riding trails in a variety of terrain and route conditions. Possible uses in the Gypsum Hills SRMA (16,930 acres) would include four-wheel driving, ATV riding, and dispersed motorized travel on all designated routes.

Travel management would protect wilderness values in the Castle Peak WSA and the entire Bull Gulch WSA by closing approximately 27,438 acres to motorized and mechanized travel, including snowmobiles and mountain bicycles.

In summary, much of the planning area (see Map 12) would be available for Semi-Primitive with Motorized Access recreation opportunities (61,795 acres). Approximately 75,693 acres (63% of the Castle Peak Area) would be within 1/2 mile of a route open to motorized vehicle use. Approximately 29,139 acres would be available for Semi-Primitive, Non-Motorized recreation opportunities. Lands along the Colorado River, I-70, and Highway 131 would continue to be classified as Roaded Natural (24,314 acres), Semi-Urban (4,309 acres) and Urban (34 acres). Regarding the seasonal restrictions of the areas not closed year-round to motor vehicles, approximately 53,854 acres would be closed during the winter months only and 38,290 acres would be open year-round. It should be noted that only the main county and State roads that define the boundary of the planning unit, and the main county roads within

the planning unit, are plowed in the winter; therefore, much of the public lands are not accessible for winter use, except by snowmobile, even without the proposed seasonal closures.

Specific Management Actions for the SRMAs

Under Alternative 5, the Bocco Mountain and Gypsum Hills areas would be designated as Special Recreation Management Areas (SRMAs). These areas would be managed to provide opportunities for off-highway vehicle use, including four-wheel trail driving, ATV and motorcycle trail riding, and moto-cross track riding for a variety of challenge and skill levels.

These areas contain public lands with significant public recreation issues or management concerns. Special management actions are warranted to meet objectives for providing or enhancing specific recreation opportunities or experiences, and to adequately resolve problems related to resource damage or conflicts with other uses of public lands, or among recreational users. Recreation management actions which may be taken include area-specific visitor information, signing, facility improvements, use restrictions, permits, monitoring, patrols, and interpretive programs. Detailed plans may be prepared for these areas and higher priority may be given to allocation of staff and operational resources in these areas than in extensive or dispersed recreation management areas.

Visitor information, including user guides or trail maps, signs, and bulletin boards, will be provided to promote awareness of the recreation opportunities, resource and management concerns, and use restrictions. Signing may include area or recreation site identification, route markers, or special needs. Interpretive programs may be developed, including on-site tours, flyers, or exhibits to promote awareness of resource values, develop sensitivity to impacts and user needs, and promote appropriate recreational use behavior and ethics.

Motorized vehicle use in these areas will be limited to designated routes or trail systems. Initially, the trail system will consist of most existing routes. These routes will be inspected periodically, and actions may be taken as needed to correct problems. Maintenance will be identified and performed as needed to extend the useful life of the routes. Routes in unusable condition or causing unacceptable damage to soils, wildlife habitat, sensitive species, or scenic values may be reconstructed, relocated, or closed. New routes may be developed to correct problems through realignment, or to interconnect trails. However, new routes will be planned and evaluated, and impacts will be mitigated, prior to construction.

Special restrictions may be applied to limit the type of use or vehicle on specific routes or trails, to avoid conflicts among uses or users, if the need arises. Facility improvements and maintenance may be provided to accommodate vehicle access and use; trailhead activities; specialized activities, such as jumps and hill climbs; and sanitation and ancillary needs. Special Recreation Permits (SRPs) will be required and issued for special or competitive events such as motorcycle or ATV races, subject to terms and conditions as needed.

These areas will be patrolled and monitored to identify visitor use, and recreation impacts and needs, on a regular schedule to allow adequate management response as required by changing conditions. Cooperative management agreements or partnerships will be entered into with user groups, organizations, or individuals, as needed to accomplish management

objectives. Sediment traps, sedimentation ponds, or revegetation of unnecessarily disturbed areas may be provided to mitigate watershed impacts of recreation use in these areas.

The Bocco Mountain SRMA and part of the Gypsum Hills SRMA in the Cottonwood Creek area would be closed during the winter from December 1 to April 30 to protect deer and elk winter habitat. Small portions of these SRMAs may be opened prior to April 30 to allow limited use, if weather conditions are suitable, and if this would not cause conflicts with winter habitat. New roads or trails in the western portion of the Gypsum Hills SRMA would only be authorized if the routes can be located out of sage grouse habitat, or if measures can be taken to avoid further fragmentation of the habitat.

Description of Administrative Access (applies to Alternatives 4 and 5)

To "provide equal access opportunities to public lands for the public and adjacent landowners", as stated in Plan Objective #7, the following policy addressing administrative access would be implemented for Alternatives 4 and 5. Administrative access can be defined as "motorized travel for purposes specifically related to completing Bureau work or specific work completed by a permittee related to an approved BLM permit." Such access could be granted to Bureau employees (for tasks such as firefighting) or to persons holding BLM permits or pre-existing access rights. Examples of projects warranting administrative access could include, but are not limited to, maintenance of fences, ditches, spring developments, communication sites, powerlines, or reservoirs. Administrative access providing temporary motorized travel could be granted on any of the non-motorized routes identified in Alternatives 4 and 5 based on the following criteria:

1. In areas closed to motorized travel, or during seasonal closure to motorized travel, normal grazing permit administration, facility maintenance, or facility operation will be accessed by foot and/or horse travel only.
2. In areas closed to motorized travel, or during seasonal closure to motorized travel, the permittee will be required to get pre-approval from a BLM authorizing officer for reconstruction of existing permitted facilities requiring motorized equipment.
3. In the case of an emergency, the permittee will be allowed access by motorized vehicle to reconstruct existing facilities, but must contact and gain approval from a BLM authorizing officer within 72 hours of the emergency.
4. The permittee will not be allowed to use motorized equipment in an area closed to motorized travel for activities other than those authorized by the BLM.

Wherever possible, these stipulations for administrative access will be written into appropriate permits, such as grazing leases and rights-of-way.

SUMMARY OF TRAVEL OPPORTUNITIES AVAILABLE UNDER EACH ALTERNATIVE

Table 1. Miles of Roads Available for Motorized Use by Road Ownership

Road Owner	Alt. 1 (Current Management)	Alt. 2	Alt. 3	Alt. 4 (Proposed Action)	Alt. 5 (Revised Proposed Action)
BLM	288	237	97	128	180
County	48	48	48	48	48
State	26	26	26	26	26
I-70	42	42	42	42	42
Total	404	353	213	244	296

Table 2. Miles of BLM Routes (Motorized and Non-Motorized)

BLM Travel Route	Alt. 1 (Current Management)	Alt. 2	Alt. 3	Alt. 4 (Proposed Action)	Alt. 5 (Revised Proposed Action)
Motorized	288	237	97	128	180
Non-Motorized	32	83	223	192	140

Table 3. Acres of Travel Designation

Travel Designation	Alt. 1 (Current Management)	Alt. 2	Alt. 3	Alt. 4 (Proposed Action)	Alt. 5 (Revised Proposed Action)
Closed	9,839	27,438	27,438	27,438	27,438
Open on Designated Routes	20,128	45,719	92,144	92,144	92,144
OHV Use*		(2,448)	(2,145)	(12,539)	(18,326)
Open on Existing Routes	15,679	46,425			
Open on and off road	73,936				
OHV Use**	(6,276)				
Total	119,582	119,582	119,582	119,582	119,582

* OHV use is defined in Alternatives 2, 3, and 4 as proposed intensive-OHV-use areas where OHV travel would be limited to designated routes within the OHV use area(s).

** OHV use is defined under Alternative 1 as existing, un-managed OHV use areas that occur within the "Open On and Off Road" travel designation.

Comparison of Alternatives

The Revised Proposed Action (Alternative 5) is the result of a progressive evolution from the continuation of current management (Alternative 1) to a travel management plan that appears to best satisfy the BLM objectives, while being responsive to public comments.

Each alternative is compared and rated on the following page, based on its compatibility with plan objectives (see Chapter 2 for objectives) and public comments (see Chapter 7 for highlights of public comments). Objectives 9, 10, and 11 are met by every alternative and are therefore excluded from the first comparison chart. Public Comment 5 likewise applies to action for every alternative, and is also excluded from its respective comparison chart.

Table 4. Degree of Compatibility with Objectives of the Plan

Plan Objectives	Alt. 1 (Current Management)	Alt. 2	Alt. 3	Alt. 4 (Proposed Action)	Alt. 5 (Revised Proposed Action)
1	Low	Low	High	High	High
2	High	High	Moderate	Moderate	Moderate
3	Low	Moderate	High	High	High
4	Low	Low	Low	High	High
5	Low	High	High	High	High
6	High	High	Low	Moderate	Moderate
7	Low	Low	High	High	High
8	Low	Low	High	High	High

Table 5. Degree of Responsiveness to Public Comments

Public Comments	Alt. 1 (Current Management)	Alt. 2	Alt. 3	Alt. 4 (Proposed Action)	Alt. 5 (Revised Proposed Action)
1	Low	Low	High	High	High
2	Low	High	High	High	High
3	High	High	Low	Moderate	Moderate
4	High	High	Low	Moderate	Moderate

Consolidation of Alternatives

Based on this review of the alternatives, most of the primary features of Alternatives 2 and 3 are covered in Alternatives 1 or 4. Alternative 1 and Alternative 4 generally address the range of compatibility of the alternatives with the objectives of the plan and degree of responsiveness to public comments. Therefore, to simplify future discussions, the EA and associated public mailings will focus only on Alternatives 1 (Current Management), 4 (Proposed Action), and 5 (Revised Proposed Action). For analysis purposes, these alternatives cover the range of travel and recreation opportunities that have been considered and would present the entire range of environmental effects that are possible.

AFFECTED ENVIRONMENT

Where is the Castle Peak Area?

The Castle Peak area (see Map 1) is in central-western Colorado, near the towns of Eagle, Gypsum, Wolcott, Bond, McCoy, Burns and Dotsero. It includes approximately 170,809 acres of land located north of the Eagle River, east and south of the Colorado River, and west of State Highway 131. The area boundary is the same as the Colorado Division of Wildlife (CDOW) Game Management Unit (GMU) 35. The area includes about 119,582 acres of public land administered by the BLM which are available for public use, 49,621 acres of private land which are not open to public use without the landowner's permission, and 1,606 acres of land administered by the State Land Board.

The Castle Peak area is near several small towns and resort areas which attract tourists year-round. Local population centers within 25 miles of the Area include the towns of Eagle, Gypsum, Vail, Beaver Creek, Avon, Edwards, Minturn, McCoy, and Glenwood Springs. This area is experiencing some of the fastest population growth rates in the State of Colorado. The Area is bordered on the south by Interstate 70, a major transportation route which links the area to Denver and other large cities in the Front Range and the rest of the country. This proximity to population centers with high growth and visitation rates and the ease of accessibility from I-70 create a high demand for outdoor recreation opportunities in the Castle Peak area.

What resources are most affected by travel?

Soils

Castle Peak is a remnant basalt cap rock overlying a marine shale deposit predominantly comprised of Pierre shale. The Pierre shale extends from Highway 131 on the eastern boundary to Eby Creek on the west and from the Big Alkali Creek drainage on the north to just north of the Eagle River on the south. Soils in the Pierre shale area are typically high in clay content, high in salts, and easily eroded by water. On drier sites and steep slopes, Pierre shale is often sparsely vegetated. Big Alkali Creek, Milk Creek, and Alkali Creek probably contribute more sediment and salinity to the Colorado and Eagle Rivers than the other watersheds combined. From Eby Creek west, past Gypsum and north along the Colorado River from Sheep Gulch to Alamo Creek, a light colored, sparsely vegetated Eagle Valley Evaporite formation can be found. This marine evaporite formation is extremely high in gypsum content and soluble in water. Watersheds in the Eagle Valley Evaporite contribute sediment and salt to the Colorado and Eagle Rivers but the amount contributed is limited due to the dryness of the area. The remaining areas are comprised of various sedimentary sandstone and mudstone formations. Soils that develop in areas dominated by sedimentary sandstone and mudstone formations are typically high in sand content. Watersheds in these areas yield large amounts of sediment to the Colorado and Eagle Rivers, but are low in salt content.

Wet weather occurs sporadically each year which limits vehicular travel in the area, as most of the roads are not surfaced. Debris flows often occur during heavy thunderstorms

which can result in road blockages on an almost yearly basis.

The fall rifle hunting season is the period when the back roads and trails are most heavily traveled, which coincides almost always with at least one large rain or snowfall event. Wet travel conditions are extended because of cool fall temperatures. The result is that motorized travel, mostly by hunters, often damages unsurfaced roads. The damage is compounded by the next year's runoff. Even minimal use of the roads in the spring can cause additional damage when soils are saturated.

The combination of soil and site characteristics in the planning area results in a very large portion of the public land being rated with a severe or moderate potential for soil erosion (see Map 13). Of the 119,582 acres of public land in the planning unit, 70,542 acres are rated as severe, 47,180 are rated as moderate, and 1,720 acres are rated as slight for erosion potential. The remaining 140 acres are covered by water surface. There are 108 miles of BLM roads on public land that traverse soils with severe potential. Soils found in these formations are easily pulverized by vehicular travel which increases susceptibility to water erosion. Wheel tracks serve to confine water which, along with steep slopes, increases water's erosive affects. OHV travel on erosive soils increases the amount of erosion from travel routes.

Water Quality

High sediment loads and dissolved solids (salts) are delivered to the Colorado and Eagle Rivers from the perennial and ephemeral drainages in the area. Increases in erosion and sedimentation have occurred as a result of the proliferation of roads and trails in the planning area. Approximately 46,008 acres (see Map 14) of public lands within the Castle Peak area are within BLM Water Quality Management Areas (WQMA). These areas were identified in the RMP as areas with water quality problems since they contribute high sediment and salinity to the Colorado River. The size of the WQMAs is larger in this plan than the size shown in the RMP. This change in the size of the WQMAs is a correction of a mapping error in the RMP and is not meant to show a management change.

Vegetation

Riparian (streamside)-wetland areas are among the most valuable habitats in the arid West. These areas are adjacent to, and dependent on, the presence of water. When functioning properly, these areas purify water by removing sediments, reduce the risk of flooding, reduce stream channel and streambank erosion, increase water stream flows and duration, support diverse plant and wildlife species, provide water for wildlife and livestock and create recreational opportunities. One of BLM's Riparian-Wetland Initiative goals (see Appendix 5) is to protect riparian-wetland areas and associated uplands through proper land management and by avoiding or mitigating negative impacts. In the Castle Peak area, there are approximately 19.5 miles of BLM routes open to motorized travel within 500 feet each side of perennial streams, known fisheries, or natural drainages exhibiting riparian-wetland characteristics. The BLM will examine opportunities to reduce the impacts of the transportation system in these areas.

The planning unit contains several major vegetation types (see Map 15): sagebrush and

grasslands (57,677 acres), pinon-juniper woodlands (37,362 acres), subalpine fir (10,039 acres), mountain brush (6,665 acres), aspen (5,638 acres), and Rocky Mountain Douglas-fir (1,649 acres). Recreationists, primarily campers and hunters, prefer the higher elevation, forested sites as a destination. Many of the campsites and new roads and trails that have developed over time occur in the forested vegetation type. When selecting the transportation system, BLM will consider this access demand and try to accommodate such uses consistent with other resource constraints.

A BLM Special Status plant species, Penstemon harringtonii, occurs in mid-elevation sagebrush parks throughout the Castle Peak Area, but is concentrated in the southwestern and northeastern portions. BLM's policy is to ensure that actions authorized on public lands do not contribute to the need to list any Special Status species. In the Castle Peak area, there are a number of roads in the immediate vicinity of known populations of Penstemon harringtonii.

Wildlife

Bighorn Sheep. A small herd of bighorn sheep exists in the northwest corner of the planning unit. There is a production (lambling) area on Black Mountain. The sheep summer in the large sagebrush basins on both the north and south sides of Black Mountain. In the fall the sheep move toward the Colorado River; in the winter as the weather conditions worsen, they drift south to a concentration area between the mouths of Alamo and Posey Creeks. In the spring they begin the reverse movement to the summer areas (see Map 16).

Raptors. There are 33 known Golden Eagle Nest Sites, 1 known Bald Eagle Nest Site and numerous other raptor nest sites along the Colorado and Eagle River drainages. See Map 17 for their approximate locations. There is another large grouping of active raptor nests on Black Mountain and the northeast slope of Castle Peak. The raptors along the river corridors are probably more affected by the presence of the river and the abundant food supply in the riparian area, than they are by the presence of roads and people. The raptors on Black Mountain and Castle Peak are likely most affected by people and disturbance during their nesting season.

Sage Grouse. CDOW estimates less than 30 to 40 sage grouse live within the Castle Peak Area (see Map 18). Historic sage grouse leks are located on West Hill and within Milk Creek Basin on public land and Waterford Ranch and near Burns, primarily on private land. Sage grouse is a species of concern and could be listed as a threatened and endangered species in the future. Most sage grouse populations in Colorado are declining, but the specific reasons for this are not clear. It likely is tied to fragmentation of habitat due to burgeoning land development and influx of people. (Braun, 1996)

There are three areas within the Castle Peak Unit that are important summer range and/or nesting habitat. The largest area spans the west side of Highway 131 from Wolcott to Wolcott Divide within the Waterford Ranch property. Although mostly on private land, the southern portion of this habitat falls within BLM's Boccho Mountain area. A large expanse of sagebrush vegetation occurs in this summer range. The second area is on BLM's West Hill near Blowout Mountain. The sagebrush slopes north of Black Mountain provide the habitat

for the third area near Burns. Nearly all of the known winter range is found in sagebrush vegetation on public land.

Mountain Lions.

The lion population is stable. The permitted harvest quota of 3 lions is easily met each year. Virtually all of the lion hunting is done with motorized transportation. Hunters drive roads within the lower elevations of the unit looking for tracks. Once a fresh track is found, tracking dogs are released. The hunters seldom leave their vehicles until the dogs locate the lion in a tree. The deer winter ranges are the common lion hunting areas because deer are the primary prey species for lions.

Elk. The elk on Castle Peak are part of the Piney elk herd which includes Game Management Units 35 and 36. The present population is 3,300 elk which exceeds CDOW's population objective (2,950 elk) for the herd in these 2 units. According to the CDOW, a portion of these elk winter outside the planning area in GMU 36 (see Map 19).

When disturbed by humans, elk generally seek refuge areas that provide desirable food, cover and solitude. During the spring and early summer, the disturbance to elk from visitors to the Castle Peak Area is low. Many of the roads in the planning unit are impassable until late spring, minimizing contact between elk and visitors at this time. Use of roads for motorized travel increases during the summer, but the elk tend to frequent the higher areas of Castle Peak away from motorized routes and tend to be dispersed at this time, thus reducing human and elk interaction.

With the start of the hunting season in late August, hunters begin to search for elk or elk sign by driving on roads and trails with 4X4 vehicles and ATVs. Hunting camps are set up throughout the planning unit, especially in the middle to higher elevations, primarily in forested areas. ATVs are often used to drive hunters considerable distances from roads, sometimes miles, in search of game. This is based on staff observations through out the Resource Area over the past three hunting seasons.

Studies done in Montana show that people hunting on foot seldom get more than a mile from a road. (Stalling, 1996; Edge and Marcum, 1991) In fact, most of their big game is shot within 2-300 yards of a road or trail. Castle Peak is a relatively small geographic area, essentially covered by a network of 404 miles of roads, including 288 miles of BLM roads. Map 22 shows public land which is within 1/2 mile of a road. Castle Peak and Bull Gulch WSAs contain the most expansive areas outside this 1/2 mile influence zone. This means that the WSAs and private land provide the refuge areas where elk can seek solitude from hunting pressure. Elk are hunted from mid-August through mid-November, with special elk hunts extending into January. A study in the Garnet Mountains of Montana demonstrated that high traffic roads consistently had lower probabilities of elk use than lower traffic roads. Areas within 1 kilometer of an open road with topographic barriers had higher elk use probabilities than areas without topographic barriers. (Edge and Marcum, 1991)

The improvement in hunting technology has increased dramatically in the last few years. Compound bows now exist that dramatically increase arrow velocity and accuracy. Muzzleloaders with scopes are the equivalent of modern center-fire rifles. Hunter success and numbers have skyrocketed. The wounding loss has increased dramatically for all

types of hunting probably because hunters feel that they have virtually unlimited range. Idaho DF&G biologists have documented that where the rut coincides with the early rifle seasons, ratios of bull to cows sagged below state goals due to the increase in bull vulnerability with game calls. (Stalling, 1996). In Idaho, Archery hunters increased from 3,000 in 1975 to 26,000 today. Their success rose from 3% in 1975 to 10% today, 75% of which are mature bulls. (Stalling, 1996) In Colorado, the number of elk hunters has increased from 102,000 in 1975 to more than a quarter million today. (Stalling, 1996)

A study in Idaho's Coeur d' Alene River drainage clearly demonstrated the affect of roads on bull mortality. The mortality of bulls was monitored between a highly roaded area and an un-roaded area. No bull lived past 5.5 years of age and only 5% reached maturity. The bull:cow ratio was 10 bulls per 100 cows with 1.3 mature bulls per 100 cows. Closing approximately 50% of these roads extended the age structure of the bull population to 7.5 years and increased the percentage of bulls to 16%. The bull:cow ratio jumped to 20 bulls per 100 cows. The un-roaded area had a bull population of over 30% and extended the age of some bulls to 10 years. The bull :cow ratio jumped to 34.5 bulls per 100 cows. (Letich and Zager, 1991)

As many as 500 elk move off Castle Peak onto adjacent private lands during hunting season. (Byrne, 1997) Research done in Montana, Wyoming and Idaho shows that closing roads to motorized travel makes it more difficult for people to reach elk refuge areas, reducing hunting pressure, and often increasing hunting success because the elk tend to remain on public land longer. (Stalling, 1996; Edge and Marcum, 1991; Leptich and Zager, 1991; Moroz, 1991) The private ranches in GMU 35 will likely continue to serve as wildlife refuge areas during hunting seasons regardless of travel management options selected for BLM lands, though travel restrictions could slow the rate with which elk move to private lands. Table 6 shows the number of elk harvested and the number of hunters and their success ratio. Over the last 5 years, the number of hunters has declined steadily. In talking with hunters over the last three years, a declining success rate is most common topic.

Table 6. Elk Harvest for Castle Peak Unit (GMU 35, CDOW, 1996)

Year	Bulls	Cows	# of Hunters	% of Success
1996	188	87	1866	14%
1995	173	64	1913	26.6%
1994	N/A	N/A	N/A	N/A
1993	182	143	2084	13%
1992	259	154	2321	21%

Deer. The deer population is decreasing in the planning unit with an estimated 4,600 animals for Unit 35 (33% lower than CDOW objectives). There are two distinct deer populations in the planning unit: the Eagle River herd and the Colorado River herd. During the winter the herds migrate down their respective sides of the mountain. The two populations do not appear to intermingle even though they both use the same summer

range on Castle Peak. Daily movements of deer on the Eagle River winter range has been adversely affected by I-70 and its associated deer fence, which have resulted in a decrease of available feeding areas (see Map 20).

Two resident population areas exist in GMU 35 along the Eagle River near Wolcott and Eagle. About 350 deer reside year-round in the largest of these resident population areas northeast of Eagle. All of the winter range in the planning unit is classified as critical habitat. Loss of any winter range through damage to vegetation from roads and trails, or decreased availability of winter forage because of human disturbance to deer during the winter, would be detrimental to the herd. These problems are compounded by the extensive residential development of private property in the area.

Management of public lands directly or indirectly has been directed at increasing the amount of grasses and forbs present. Managing for grasses has a deleterious effect on shrub production; thus elk are favored over deer.

Elimination of predator control and the fur market crash has permitted the population of lions and coyotes to proliferate. These two animals are efficient predators of fawns and adults as well. An Arizona study estimated an annual kill of 28 deer by a lion. (Shaw, 1975) Hornecker estimated an annual kill per lion of 14-20 deer per year. (Hornecker, 1970). The higher rate in Arizona is attributed to spoilage of the carcass during warm weather.

Mule deer, like elk, are readily affected by hunters and hunting pressure. Deer have moved to their wintering areas by the start of the rifle seasons in October. They tend to winter in areas with a large shrub component in the vegetation, with sagebrush being a desirable forage species. These areas typically are open and have a limited cover of trees, mostly pinon/juniper. They depend on their exceptional eyesight to see and escape danger. With easy access and high-power rifles, the hunters have a tactical advantage over the deer because the hunter can shoot long distances and move quickly with vehicles or ATVs to cut off deer moved by other hunters. This means that it becomes very difficult for a legal buck deer to escape the hunting pressure. Very few bucks live past 2 1/2 years of age, the point at which they usually became a legal buck. Table 7 gives the number of deer harvested and the number of hunters for 4 of the last 5 years.

Table 7. Deer Harvest for Castle Peak Unit (GMU 35, CDOW, 1996)

Year	Bucks	Does	# of Hunters	% of Success
1996	444	156	1682	39%
1995	333	60	1621	26%
1994	N/A	N/A	N/A	N/A
1993	319	21	2001	17%
1992	478	257	2363	32%

There has been a steady increase over the years in the total number of hunters, improvement in their technology for killing at long distances, and their mobility. There are more and more people out in traditional winter use areas enjoying cross country skiing, snowmobiling and 4-wheeling. Residential development of traditional winter range also reduces available winter forage. Public land management favors the production of herbaceous forage over shrubby or woody vegetation by public demand. All of these factors are contributing to the failure to maintain the deer population at CDOW's desired level.

Visual Resource Management (VRM)

One of the Bureau's general management objectives for public lands is to maintain existing visual quality, protecting unique and fragile scenic values. Uses, development projects, and management activities on public lands are evaluated for visual impacts, and mitigation measures are identified to maintain appropriate visual contrast levels from the uses or activities. Visual Resource Management (VRM) classes are established in the current Resource Management Plan. These classes are based on a given area's scenic quality, viewing distance, viewing volume, and public sensitivity to landscape modifications. The objectives of the various VRM classes are aimed at protecting the most scenic public lands which receive the greatest amount of public viewing, and place less emphasis on areas of relatively common scenery that are seldom seen by the public. The most important travel corridors for visual resource management are Interstate-70, the Colorado River Road, and Highway 131. Views from county and BLM roads and trails within the area are considered of lesser importance, except for those around Castle Peak (See Map 21 for the current VRM Classes for the Planning Area).

VRM Class I areas have high scenic quality, with unique landscape features, and are essentially natural, free of man-made landscape modifications. The management goal for these areas is to preserve their natural landscape character. Visual contrast of management activities should be very low and basically unnoticeable. Approximately 6,849 acres are under this protective management class, located in a portion of the Bull Gulch WSA. This area is also an Area of Critical Environmental Concern (ACEC) for natural scenic values.

VRM Class II areas have high scenic quality, with a high variety in the landscape features, and are highly viewed and highly sensitive to landscape modifications. The management goal for these areas is to retain their landscape character. Visual impact of management activities must blend in with the natural landscape, and visual contrast must be low and not attract attention. Approximately 49,637 acres are under this management class including the Colorado River corridor, portions of the Eagle River corridor between Eagle and Wolcott, the Highway 131 corridor, and the Castle Peak high country.

VRM Class III areas have moderate scenic quality, with moderate landscape variety and may be moderately to highly viewed, and visual sensitivity is moderate. The management goal for these areas is to partially retain their landscape character. Visual impact of management activities may be evident and visual contrast may be moderate but not dominate the natural landscape character. Areas under this management class include mixed sagebrush/pinon-juniper woodland areas near Horse Mountain, Winter Ridge Road,

the gypsum slopes along the Colorado River between Trail Gulch and Alamo Creek, and the slopes along the Eagle River west of Eagle.

VRM Class IV areas have relatively common scenic quality, with low landscape variety. They receive low to moderate viewing volume, and visual sensitivity is low. The management goal for these areas is to allow modification of the landscape character. Visual impact of management activities may be evident and visual contrast may be moderate to high, and dominate the natural landscape character. About half of the acreage in the planning area is under this management class, including most of the sagebrush and pinon-juniper woodland country in the Blowout to Greenhorn Mountain, Windy Point, Pisgah Mountain, and Winter Ridge.

How does the public use the Castle Peak area for recreation?

The primary uses of public lands in the planning unit include river running, fishing, sightseeing, OHV riding, driving for pleasure, mountain biking, and horseback riding. Demand for fall use among locals and non-locals peaks during the big game rifle hunting season, and appears to be increasing for earlier archery and black powder hunting seasons. Demand during the spring is limited to the local population, and mainly for activities similar to those during the summer. There is some demand for winter use in the area for snowmobiling, cross country skiing, and snowshoeing. Castle Peak is important to locals for short trips "close to home" throughout the year.

Demand for commercial recreational use in the area is also increasing as recreation service providers seek to expand the opportunities offered to growing numbers of visitors. Interest in providing jeep tours, mountain bike tours, horseback trail rides, horse pack overnight trips, rock climbing, and big game hunting-related services is growing. Demand for commercial use of the area is influenced by the unavailability of permits on nearby National Forest lands. Commercial outfitters bring more visitors to the public lands than would normally occur. The most notable increases in the past 10 years has resulted from jeep tour operations and big game hunting.

Visitor use over the last 5 years appears to be increasing, especially for 4x4 driving and OHV riding. Hunters appears to be predominantly repeat visitors with some increase in new visitors. An increase in hunting use in the Pisgah Mountain area occurred over the last 8 years since public access was acquired into the area in 1987 through a land exchange.

Estimated Visitor Use Data

The estimated annual recreational use for 1995 is 14,000 visitor days based on periodic sampling primarily during the summer and fall, anecdotal reports from locals, outfitter and guide use reports, and CDOW hunting license records. Primary uses include hunting (60%) and 4x4 driving, motorcycling, or ATV driving (30%).

Castle Peak Area Questionnaire

In April 1996, the BLM sent out 939 Castle Peak area questionnaires to acquire information

about current uses in the area, the problems visitors encounter, and some possible solutions to those problems. Results of the questionnaire are available at the BLM office. Based on the questionnaire, the top five uses of public lands in the planning area in 1995 were hunting, wildlife viewing, sightseeing, camping, and pleasure driving.

How does the BLM currently manage visitor use in the Area?

On-site visitor management controls and regulations in the area are low-key, and the Bureau presence is light throughout the year. Visitor services patrols are more frequent during the fall hunting season, but not intensive. Bulletin boards are used to post access information and recreational use restrictions and ethics. Bulletin boards are provided at the Winter Ridge access point, along the Milk Creek Road, and at the junction of Blue Lake and Coberly Gap Roads. Signing is mainly aimed at identifying public land boundaries along public roads, WSA boundaries, and a few BLM road numbers. Other signing is provided for firewood cutting areas and to post 'No Dumping' at problem areas.

What accessibility opportunities are there for persons with disabilities?

The dispersed recreation opportunities available in the planning area are largely in undeveloped settings with no facilities to accommodate uses or activities for persons with disabilities. Access to most opportunities is available by motorized vehicle on the extensive system of roads, and are therefore accessible to persons with disabilities.

However, dispersed recreation sites are unimproved and present many barriers to persons with disabilities once they arrive at a given area. Campsites, scenic overlooks, or special feature sites have unimproved parking, paths and activity areas, and persons may not be able to move around due to poor soil surfaces, rough or uneven ground, steep slopes, or thick vegetation cover. Some undeveloped sites are accessible to persons in wheelchairs because of naturally favorable conditions, but these sites are few and accessibility is marginal at best.

Bureau policy is to provide persons with disabilities opportunities to experience or participate in recreation activities which are available as much as possible. However, undeveloped areas will not normally be modified or special facilities developed for the sole purpose of providing access for persons with disabilities.

No information is available about the extent or types of disabilities that visitors in the planning area have. However, it is known that some visitors have limited physical abilities and rely on motorized vehicles to move around, both on and off the road, while visiting the area. Although able to walk or hike, some of these persons are limited in ability due to poor health or physical condition, and cannot travel on foot over great distance or strenuous terrain.

What are the current Recreation Opportunity Setting (ROS) Classifications?

The Castle Peak area provides a range of recreation opportunities. Refer to Map 3 for the current ROS designations (Alternative 1). Numbers of visitors to the planning area and

types of activity vary depending on the season or time of year. During the peak use season in the fall, encounters among visitors are relatively frequent in most of the area and opportunities for solitude and isolation from other people are limited to the most inaccessible places. Approximately 94,329 acres, or 79% of the Castle Peak Planning Area, is within 1/2 mile of a route open to motorized travel (see Map 22). During the summer, activity is mainly along roads and encounters among visitors are generally infrequent, except along the Milk Creek access route to Castle Peak, which is more heavily used than other areas. Opportunities for solitude are more widely available in the summer throughout the area. Recreation use during the winter is very low for most of the area, except along the main access roads when these are passable by vehicle.

Many of the recreation opportunities on public lands are also available on surrounding National Forest lands. However, BLM lands are important in supplying summer use opportunities early in the season when access is not yet available to the high country due to snowmelt conditions. BLM lands also supply fall use opportunities when early winter storms drive hunters out of the high country.

The overall character of the Castle Peak Area ranges from Rural to Semi-Primitive. Most of the area is classified as Semi-Primitive with Motorized access (86,619 acres), with a relatively small portion in the Bull Gulch area as Semi-Primitive with Non-Motorized access (7,296 acres). Lands along the Colorado River, Eby Creek Road and I-70 and Highway 131 are classified as Roaded Natural (21,087 acres), Semi-Urban (4,586 acres) and Urban (1 acre).

The Semi-Primitive, Motorized areas include the Dry Lake-Greenhorn Mountain area, Castle Peak, Horse Mountain, Pisgah Mountain and Windy Point areas. The setting in these areas is characterized by a predominantly unmodified natural environment with relatively small scale modifications caused by human use and development. These landscape modifications mainly consist of the system of roads and trails (unimproved and improved), fences, corrals, and water developments (springs, ponds). The setting around the Dry Lake/Gypsum Hills area includes more obvious modifications evident in a greater density of roads, the gypsum quarries, topsoil mining, and the old sawmill. Recreation-related modifications are generally small scale and spread throughout the area, and mainly consist of trails and dispersed campsites, with the most obvious being the OHV trails and tracks around the Dry Lake area, Blue Hill, and Bocco Mountain, especially on the slopes.

What problems do visitors to Castle Peak encounter?

Based on the questionnaire, the most common problems that visitors encounter are finding access to BLM land blocked by private property, not finding trophy deer or elk on public lands, too many areas open to motorized vehicles, and too many areas closed to motor vehicles.

In April 1996, the BLM held three public open house meetings in Gypsum, Eagle, and McCoy. A summary of the results of the open houses is available at the BLM office. Sixty-four people attended the open house meetings and identified the following issues, concerns or problems: unequal and unfair access to BLM land by private landowners; need to improve hunting opportunities and wildlife habitat in the area; poor quality hunting; game

movement to inaccessible places (private property); too much road hunting, and the impacts of OHVs on wildlife; too many parallel roads and dead-end spurs; not enough opportunities for open areas (OHV and motorcycle); need for better informational and boundary signing; maintaining access to WSAs while still providing for opportunities for solitude; conflicting uses within the WSAs; and grazing permittees and outfitters needs for management of their businesses.

What about Wilderness Study Areas (WSAs)?

Approximately 27,438 acres of public land in the Castle Peak Area were identified as Wilderness Study Areas (WSAs) through the BLM's intensive wilderness inventory process completed in 1980. That inventory established the 12,237 acre Castle Peak (CO-0780-433) and the 15,201 acre Bull Gulch (CO-070-430) WSAs shown on Map 23. The suitability for wilderness designation of these WSAs was evaluated through the Glenwood Springs Resource Management planning process completed in 1984. Approximately 10,414 acres of the Bull Gulch WSA were determined by the BLM to be suitable for wilderness designation by congress, with the rest of this WSA and the entire Castle Peak WSA recommended for non-wilderness. Congress has the option of designating as wilderness the entire acreage or none at all, and has no deadline to act on the agency recommendations. However, until Congress designates these WSA's as wilderness or releases them for other uses, they will continue under interim management to preserve their wilderness characteristics.

Current travel designations allow motorized travel on several routes within both WSAs. The portion of the Bull Gulch WSA recommended for wilderness is designated 'Closed' to the use of motor vehicles including snowmobiles. The remaining 4,787 acres in this WSA are designated 'Open' and motorized vehicle use is allowed on and off the roads and trails, including snowmobiles. The Castle Peak WSA is designated 'Limited' and motorized vehicle use is allowed on several designated routes within the WSA. Current management designations do not address use of mountain bikes, and they may be used on or off the roads and trails in the WSAs.

Under the Bureau's Interim Wilderness Management Policy, use of motorized vehicles and mountain bikes may only be allowed on existing ways and trail and within 'Open' areas that were designated prior to October 21, 1976, and may be limited or closed to such use if it threatens to impair the area's wilderness values.

Colorado Conservationist groups proposed in 1994 that the entire Bull Gulch and Castle Peak WSAs be designated wilderness. The Conservationists' proposal also includes an addition of approximately 3,996 acres to the Castle Peak WSA on the north and east boundaries. These additional lands are not currently under BLM Interim Wilderness Management. Conservationist groups may be pursuing wilderness designation of these areas through the legislative process, and they have asked the BLM to reconsider wilderness values of areas where their wilderness proposals differ from the Bureau's wilderness recommendations. They have also asked that the Bureau evaluate the impacts of actions to their proposed wilderness additions.

What are the current Off-Highway Vehicle (OHV) designations?

Refer to Map 1 showing current OHV designations (Alternative 1). These OHV use designations for the Castle Peak Area were established in the Glenwood Springs Resource Management Plan in 1984.

Open Areas (73,936 acres).

These are areas where all types of vehicle use is permitted at all times, anywhere in the area subject only to limitations of the natural terrain and operating regulations and standards in federal regulations (43 CFR 8340). Motorized use is allowed as long as it does not cause, or is likely to cause, significant, undue damage to or disturbance of the soil, wildlife, wildlife habitat, improvements, cultural or vegetative resources, wilderness suitability, or other authorized uses of the public lands. Portions of the Bull Gulch WSA are designated 'Open', and include several existing roadways (9 miles).

Castle Peak Limited Area (20,126 acres).

Motorized vehicle use is limited in this area to designated roads and trails year-round, except for snowmobiles operating on snow. The purpose of this designation is to prevent conflicts between motorized and non-motorized recreation opportunities. This Limited Area includes all of the Castle Peak WSA. Several route segments are designated to allow motorized travel within the WSA (3.6 miles).

Pisgah Mountain Limited Area (15,679 acres).

Motorized vehicle use is limited in this area to existing roads and trails year-round, except for snowmobiles operating on snow. The purpose of this designation is to prevent conflicts between motorized and non-motorized recreation opportunities.

Bull Gulch Closed Area (9,839 acres).

All motorized vehicle use including snowmobiles is prohibited year-round. The purpose of this designation is to protect primitive, non-motorized recreation opportunities. The area includes the portion of the Bull Gulch WSA recommended for wilderness designation.

How is the current transportation system maintained?

The Glenwood Springs Resource Area is annually funded for about 75 miles of road maintenance. Since 1988 an average of 28 miles of roads were maintained annually in the Castle Peak Area. Of this total, 85% of the BLM road maintenance was completed with a road grader and 15% of the maintenance was done with a dozer. Typically road graders are used to re-establish the surface of a road to improve traffic speed and maneuverability. Dozers are used less frequently on roads to re-establish water drainage (ditches or water bars) and repair minor road damage or stream crossings.

Rarely are any roads maintained more than one time per year; many roads are maintained much less than once per year (See Table 12, Summary of Road Maintenance). Road conditions and amount of traffic generally dictate the type of equipment (grader or dozer) used for maintenance. Annual road inspections determine the type of equipment needed for maintenance.

In recent years, the BLM has funded numerous contracts that have enhanced public safety and improved travel on certain roads. Such projects on BLM's Milk Creek Road include the installation of a one-lane bridge (1995), the installation of a cattleguard (1994), and culvert upgrades and installations (1990-1994). The realignment of 2 road segments along the Coberly Gap Road were completed in 1993 to mitigate impacts to riparian areas. The Windy Point junction with Highway 131 was improved (1995) to meet Colorado Department of Transportation access standards and provide visitor parking near the road junction.

Because of historic access routes and various private lands within the BLM land base, certain county roads cross public lands and are maintained by Eagle County, at a minimum, one time per year. The Colorado River Road (Eagle County Road 301) provides many direct and indirect access points to public lands along the Colorado River from Dotsero to McCoy. Other Eagle County roads that provide primary access to BLM lands include: Road Gulch (Eagle County Road 51) and Agnew Gulch (County Road 50) north of Gypsum accessing the Dry Lake/Gypsum Hills area, Milk Creek (Eagle County Roads 4 and 54) providing primary access to Castle Peak west from Highway 131 about 3 miles north of Wolcott, and Big Alkali Creek (Eagle County Roads 41 and 41B) southeast of Catamount Bridge and east of Burns. Other County Roads providing access to BLM include Eby Creek (County Road 33) north of Eagle and Castle Creek (County Road 33A) northeast of Eagle.

Three other County Roads within the planning unit provide public access to public lands, but are classified as "non-maintained": Trail Gulch (County Road 51) south from Colorado River to Agnew Gulch, Big Red Hill (County Road 50) from Agnew Gulch northeast towards Big Red Hill, and State Bridge (County Road 27) which traverses the south bank of the Colorado River west of State Bridge.

What are the cultural values of the area?

Numerous cultural inventories have been conducted within the planning area and are on file at the BLM office. Sites identified and recorded during these inventories range from prehistoric trails and camps to isolated artifacts and historic cabins. Scientific research using data from these sites has provided insights into past lifeways and activities and has made a valuable contribution to our knowledge of the history and prehistory of the area. These cultural properties are a fragile resource and can easily incur damage through inadvertent surface disturbance.

What is the Plan's relationship to Critical Elements?

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EA analysis. Cultural resources, air quality, threatened or endangered species, wetlands or riparian zones, special water quality areas, wilderness, Native American religious concerns, areas of critical environmental concern, and wilderness are critical elements that exist within the planning area and are specifically addressed within this plan. There are no wild and scenic rivers, floodplains, prime or unique farmlands, hazardous or solid wastes within the planning area.

ENVIRONMENTAL EFFECTS

What are the environmental effects of the travel plan?

Air Resources

Impacts to air quality would be minor, short-term, and localized with all alternatives. The amount of dust produced would vary directly with the amount of motorized use, the miles of roads or area open to motorized travel, and the erosiveness of the soil where the motorized travel is taking place. Alternative 4 provides 128 miles and Alternative 5 provides 180 miles of designated routes for motorized travel, both less than the 288 miles currently available for motorized travel in Alternative 1.

Soil

In the Castle Peak area, a large percentage of the land surface has soils with a potential for severe erosion. Of the 119,582 acres of BLM land, soils with potential for severe erosion cover 70,542 acres, or 59%, of the public lands (see Map 13).

Soils with a severe rating are not localized in any one area but are spread throughout the planning unit. With such a large percentage of the area classified as having severe soil erosion potential and the location of these soils so widely spread, it would be impossible to develop a road and trail system in the Castle Peak area without a considerable amount of road mileage on soil with potential for severe erosion. The present road system (Alternative 1) has nearly 40% , or 111 miles of 288 BLM roads, located over soils with a severe erosion rating (see Table 8 below). While non-motorized travel, especially from mountain bikes and horses, does affect soils, the impacts of such uses are more localized and relatively insignificant compared to the impacts to soils associated with motorized travel.

Geological (natural) erosion is the primary source of soil loss in the area. Mass wasting, sheet erosion on barren, steep slopes found throughout the travel plan area, and gully bank erosion are the primary sources of this soil loss. Mass wasting in the form of slumping and mud flows are a particular problem on the Pierre shale-derived soils located in the Milk, Alkali, and Big Alkali Creek Watersheds surrounding Castle Peak. Barren slopes are concentrated in Pierre shale areas and on the chalky, white Eagle Valley evaporite formations found north of the Eagle River between Eagle and Gypsum, and in the Trail Gulch area 12 miles north of Dotsero along the Colorado River Road. Gullies are found throughout the area.

When evaluating the potential soil loss by alternative, the most important statistic is the amount of road mileage on soils with potential for severe soil erosion. Alternative 1 would result in the greatest amount of soil loss; Alternative 4 would result in the least amount of soil loss. Soil with slight erosion potential erodes at 0-2 tons per acre per year, the medium erosion rate is 2-5 tons per acre per year, and the severe erosion rate is 5-12 tons per acre per year. The amount of soil loss at these rates is based on natural processes, without human-caused impacts from a transportation system. Any soil disturbance resulting

from visitor use, such as by OHV travel, would increase the rate of soil loss proportionate to the amount of such disturbance.

Table 8. Miles of BLM Roads in Areas With Soil Erosion Potential

Soil Erosion Potential	Alt. 1 (Current Management)	Alt. 4 (Proposed Action)	Alt. 5 (Revised Proposed Action)
Slight	9	5	6
Med	168	66	109
Severe	111	57	65
Total	288	128	180

In Table 9, the second column shows natural soil losses. Disturbances such as roads increase the rate of erosion above natural rates. The third column shows the soil loss that would occur assuming a 10% increase in erosion rates as a result of human disturbances. Under this scenario, soil loss from 100 acres of road would vary from 220 tons per acre to 1320 tons per acre, depending on the soil's potential for erosion. The last column shows a scenario where the amount of soil loss by erosion category increases as the erosiveness of the soil increases.

Table 9. The Multiplier Effect of Man-Caused Disturbances to Soils of Varying Erosion Potential

Soil Erosion Potential	Sediment Yield (Tons/Acre) for 100 acres	Sediment Yield for 100 Acres with +10% increase	Sediment Yield for 100 Acres with a +10% increase for "Low" soils, 15% for "Med" soils and 20% for "Severe" soils
Low (0-2 Tons per Acre per Year)	200	220	220
Medium (2-5 Tons per Acres per year)	500	550	575
Severe (5-12 Tons per Acres Per year)	1200	1320	1440

Table 9 shows the magnitude of increase in soil loss that occurs as the erosiveness of the soil increases, and is not meant to show the soil loss from any specific soil association or for any particular alternative. This suggests the importance of limiting the mileage of roads on soils with severe potential for erosion if the goal is to limit soil loss.

Total soil losses from human disturbances would differ for each alternative. Three factors affect the amount of soil loss: (1) the size of the area where motorized travel is permitted; (2) the amount, location, and timing of motorized use; and (3) the erosiveness of the soil where this travel occurs.

Motorized travel damages soil in several ways. Vehicles traveling off the roads damage vegetation resulting in a loss of protective cover. Vehicles also cause rutting which provides runoff water with an avenue to accumulate. Ruts are often produced on steep hills as a result of OHV hill climbing. Ruts on steep slopes increase water velocity as the slope increases. Vehicles break down the soil particle size. As the soil particles size is reduced, the weight to surface ratio is reduced and the force required to move the soil particle is also reduced. As water picks up more sediment, the ability of the mixture to erode increases. The erosive power of water is greatly increased with confinement.

Alternative 1 has the most area available for OHV use and provides minimal opportunities to manage travel routes to reduce soil erosion on the more erosive soils or restrict travel in known problem areas. Alternatives 4 and 5 both would provide more opportunities to reduce soil erosion by limiting motorized travel to designated routes and establishing seasonal restrictions.

While Alternative 5 provides more miles of routes for motorized travel, the increase in mileage from Alternative 4 is primarily due to replacing and expanding the Intensive OHV Use Areas with a Special Recreation Management Area (SRMA) designation which provides both greater opportunities for OHV travel as well as greater control of OHV use activity by establishing a system of designated routes for the SRMA. With Alternative 5, mitigating measures could be implemented to reduce impacts to soils, and routes could be closed if vehicle use caused unacceptable damage to soils. Alternative 5 also has more miles of roads closed during winter and early spring when roads are wet and most susceptible to eroding.

Water Quality

The Glenwood Springs Resource Management Plan (RMP) designated 2 areas around Castle Peak as Water Quality Management Areas (WQMA). See Map 14. The water quality objective in the RMP is "to maintain or improve existing water quality in the resource area where possible." Public lands within the Milk/Alkali Creek Watershed (15,666 acres) and the Big Alkali Creek Watershed (30,342 acres) contribute sediment and salinity to the Colorado River system as well as other pollutants in small quantities. Reduction in the mileage of roads available for motorized use and the amount of area available for OHV use would reduce the soil loss caused by vehicular travel in the WQMA. Alternatives 4 and 5 would reduce the miles of road open to motorized travel and will therefore help meet the RMP water quality objective for the WQMA.

A hill climbing area will be authorized in the Gypsum Hills SRMA north of Gypsum. While these intensive motorized use areas increase soil loss, the opportunity to select the specific area to be used and to plan for mitigating measures to reduce the impacts should greatly enhance the BLM's ability to further meet the RMP water quality objective.

Perennial and intermittent streams are found throughout the planning area. These streams transport soil from the surrounding watershed. The closer a road is to a water course, the more direct the effects that road has on sediment transportation and the greater the effect that road has on reducing water quality. Riparian vegetation along streams acts to intercept and hold soil. Riparian vegetation is especially important for maintaining water quality because it reduces a stream's ability to transport sediment.

For analysis, a 500-foot buffer zone was established along all perennial streams, known fisheries, and/or riparian areas. The amount of roads bisecting the buffer zone presents a sense of possible impacts to water quality. The more miles of road in the buffer zone, the greater the negative impacts of the travel system on water quality. Table 10 shows the miles of motorized routes which occur within the 500-foot buffer for streams, fisheries and riparian areas.

Table 10. Road Miles within Streamside/Riparian Buffer Zone and Number of Stream Crossings.

	Alt. 1 (Current Management)	Alt. 4 (Proposed Action)	Alt. 5. (Revised Proposed Action)
Miles of road within 500 ft. Buffer Zone	19.5	8.6	8.7
Number of Stream Crossings	14	8	7
Miles of Buffered Road. having "severe" soil rating	11.2	5.5	5.2

Alternative 1 has the most miles of road within the buffer zone and the most number of stream crossings, thereby having the potential for the greatest negative effects on water quality. Alternatives 4 and 5 would have generally similar mileages and number of stream crossings. Both alternatives would reduce the overall impacts to water quality when compared to the existing transportation system (Alternative 1). Similar impacts can be expected when comparing the soil erosion potential for the buffer zones, riparian zones, or stream crossings. The more miles of road traversing soils with severe erosion potential within these buffered areas, the greater the negative impacts to water quality and soil

erosion. Alternative 1 provides the greatest impact (11.2 miles) and Alternatives 4 and 5, having similar results, reduce the overall impact to riparian areas, particularly those with severe erosion potentials.

The objective of the Federal Clean Water Act of 1987 (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The State of Colorado has prepared "Status of Water Quality in Colorado" and "Colorado Nonpoint Source Assessment Report" to meet requirements of the Act. Those reports identified the Colorado River from State Bridge to the Roaring Fork River as being use impaired because of sediment, and Milk and Alkali Creeks as priority watersheds for nonpoint source management. The CWA requires these segments or streams be managed by implementing best management practices and monitored to assure progress toward CWA objectives. Alternatives 4 and 5 reduce the miles of roads open to vehicular travel and areas open to OHV use. Sediment will, thereby, be reduced from the travel plan area in general, and in particular from the priority Colorado River reach and Milk and Alkali Creeks. These alternatives will help meet the objective of the CWA.

Vegetation, Special Status Plants

Any increase in roads or surface disturbance in the areas where Penstemon harringtonii plants occur may result in negative impacts to individual plants or populations.

Alternative 4 would provide the most protection for Penstemon harringtonii by closing a substantial number of roads in this plant's habitat. Alternative 1 provides the least protection to populations since new roads and trails can be established under current travel designations which allow cross-country motorized travel. Alternative 5 provides less protection than Alternative 4, due to the more extensive road network near known populations in the southwest portion of the planning area. Alternative 5 does prohibit cross-country travel and does provide for OHV use in a managed setting within the SRMAs affording greater opportunity to manage impacts to sensitive species, including Penstemon harringtonii.

A survey for Penstemon harringtonii will be conducted prior to any new road or trail construction or other surface-disturbing improvements in potential habitat throughout the planning area. Since the Gypsum Hills SRMA is near known populations of Penstemon harringtonii, the BLM will attempt to inventory the area depending on the availability of funding within five years. Adjustments to the planned road and trail system could be made based on the inventory results.

Wildlife

In general, direct human and wildlife interaction negatively affects wildlife, so the greater the level of interaction, the greater the effects to wildlife. Motorized transportation allows many more people to enter an area and to do it much faster than by non-motorized methods of travel, thus increasing the number of wildlife and human interactions. While non-motorized travel does affect wildlife, the effects are substantially less than motorized travel effects. Therefore, this discussion will focus primarily on the effects to wildlife and wildlife habitat from motorized travel.

There are two periods during the year when nearly all species of wildlife are very vulnerable. This is during the reproduction period and during the winter period. Wildlife species vary widely in their ability to tolerate intrusions, harassment, and stress during these periods. During the winter months, the protein content of herbaceous material usually drops well below 5-7% which is the point when deer and elk begin to catabolize body reserves to maintain dietary protein levels. Both deer and elk shift to a higher shrub intake in an attempt to keep the dietary protein levels above 7%. This is done at the expense of digestion rates. The high cellulose content of shrubs makes digestion difficult and it becomes hard for deer especially, to process enough volume of forage to maintain body reserves. Whether the animal survives through the winter months depends on several things. Unseasonably cold temperatures early in the fall force animals to use body reserves which would normally be kept for later in the winter. A winter with abnormal amounts of wind causes animals to use extra body reserves to maintain body temperature. A late spring means the green grass is late-appearing which further delays the chance to gain necessary nutrients. Stress caused by people results in body reserves being used. All these things have a hand in determining whether an animal lives or starves to death.

During reproduction, both the offspring and the mother are quite vulnerable. Loss of young to predators can be a major factor in population recruitment. Abandonment of young due to harassment by people is common for some raptors. Milk production by herbivores places a heavy demand on the body which may not be able to cope with stress caused by harassment. All these factors and more determine the success of reproduction.

The primary sources of human and wildlife interaction include visitors operating 4X4 vehicles, motorcycles or 4-wheel drive ATVs for sightseeing, pleasure riding, "four-wheeling" or hunting. A common misconception is that ATV's are only used during hunting seasons to drive to an area, and are then parked while the rider goes hunting. In fact, many riders appear to seldom stray far from their ATV, often riding all day in pursuit of game, enabling them to cover a much larger area than possible on foot or horseback.

Wildlife species tend to react to the presence of people in different ways. Deer, for example, tend to remain in small groups and more easily adapt to the routine presence of people following established patterns. Deer try to be more secretive and are often able to hide, but are not prone to migrate from the area. Elk tend to occur in larger groups and to be more sensitive to the presence of people. If disturbed, elk will sometimes migrate to new areas and tend to seek remote areas where they can get away from human presence and hunting pressure. Within the Castle Peak area, the impact from people during hunting season is much greater than any other time of the year.

Bighorn Sheep.

The Bighorn sheep population will continue to be lightly impacted in Alternative 1 since much of the Bighorn sheep summer range is in the Bull Gulch WSA and the Black Mountain area (see Map 16). The WSA is closed to motorized vehicles and the Black Mountain area is inaccessible to all but 4x4 vehicles and ATVs. The only road into the Black Mountain area which does not cross private land is a road pioneered by hunters. The private land is posted and not open to the public. It is open to the outfitter which leases the private land. The current travel designations make the area accessible by 4X4 vehicles and ATVs, which makes hunting and viewing easier, but increases disturbance to

the animals, especially in their production or birthing areas. The low number of sheep hunters, due to the number of limited permits (2), makes the impact to sheep from hunters virtually undetectable. Most of the Bighorn sheep winter habitat is within the Bull Gulch WSA, an area of few roads and trails. The current level of disturbance to the sheep does not appear to have any impact on the sheep population.

Alternatives 4 and 5 would further reduce human disturbance of the sheep. Access to their habitat by visitors would be more difficult because the area would be limited to non-motorized travel only. Hunting for sheep will be somewhat more difficult. Overall, the impacts to Bighorn sheep from disturbance by visitors would essentially be eliminated in either Alternative 4 or 5, and would remain only slight in Alternative 1.

Raptors.

Many of the known raptor nests are located along the Eagle or Colorado Rivers in places which are very accessible, often near a major state or federal highway or county road, suggesting motorized travel has had a negligible effect on the nest sites (see Map 17). The presence of the water and a potentially better food source is apparently more important than the affect of people. Alternative 1 would have a low impact on the raptors nesting along the rivers. It would have a moderate affect on the raptors nesting on Black Mountain and Castle Peak. These raptors are apparently much more sensitive to the affect of people and have sought out more secluded areas. By increasing motorized access to these areas, the level of impact would be raised. Alternatives 4 and 5 because of the travel limitation for non-motorized use would have a low impact on the people-sensitive species and low impact on the raptors nesting along the rivers.

Sage Grouse.

Within the Castle Peak planning unit, 3 primary areas (West Hill northwest of Gypsum, Burns, and Horse Mountain north of Wolcott) have been identified as important nesting habitat for sage grouse (see Map 18). Much of the sage grouse habitat near Horse Mountain is on private land.

Alternative 1 would have a high impact to sage grouse, mostly due to the further destruction of their habitat from the expanding network of roads and trails or by direct disturbance to the birds during the winter, breeding and nesting season. Given the uncertainty as to the chances for long term survival of these birds in this area, it is unlikely that impacts to the birds from visitors are a significant factor in their long term survival. Nonetheless, the BLM is obligated to consider prudent measures to reduce the impacts of the transportation system on sage grouse.

Alternatives 4 and 5 would both increase and reduce human impacts to sage grouse and their habitat by designating a transportation system to avoid further habitat fragmentation. However, designation of the OHV Use Area near Blowout Mountain and Bocco Mountain would put heavy OHV use in the same areas designated important wintering and nesting habitat. The OHV Use Areas in Alternative 4 or SRMAs in Alternative 5 are designed to maintain or enhance motorized recreation opportunities and were selected because accommodating such uses in a reasonable manner is a goal of the travel plan. The sites were also selected because such uses are already occurring in these areas and it would be easier to accommodate such uses rather than attempt to move the use elsewhere.

Generally, the areas have less erosive soils or less extreme topography, making them suitable for more intensive motorized uses.

It is likely that visitor use in the OHV Use areas or SRMAs will increase, thus increasing the chances for conflicts between sage grouse and sage grouse habitat and visitors.

Alternative 5 would reduce this apparent conflict by including seasonal closures in the Bocco Mountain SRMA and by incorporating specific management goals for the SRMAs designed to reduce impacts to sage grouse and wintering deer (see Chapter 2, Description of Alternatives, for more details).

Mountain Lions.

The lion population will probably not be affected to a measurable amount by Alternative 1 and lion hunting success will likely remain unchanged. The CDOW currently issues 3 mountain lion permits in the planning unit each year.

Alternatives 4 and 5 would have a moderate impact on lion hunting with the harvest of mountain lions made more difficult because of the winter closure on roads particularly in the northern portion of Castle Peak. However, the main winter concentration areas for deer, and thus preferred areas for mountain lion hunting, can be accessed by at least one main road. Proposed road restrictions will greatly reduce the practice of hunters driving roads in vehicles or on snowmobiles looking for lion tracks before releasing their dogs. This would make lion hunting a more leisurely experience because horses would be used to travel in seasonal closure areas.

Elk.

Elk will be increasingly affected by visitors in Alternative 1. As increasing numbers of visitors find access to public lands via the existing and proposed transportation system, elk and elk habitat become more impacted. Elk will be more prone to move earlier off public lands. Instead of the seasons and weather being the primary factor affecting elk migration, the hunting pressure of the first hunting season will start the migration to public or private land refuges. This will make controlling the population through hunting much more difficult and increase big game damage to fences, haystacks or livestock forage on private land.

It will be much more difficult for visitors to reach the higher elevation forested areas, preferred for camping and elk hunting in Alternatives 4 and 5. This will reduce the number of hunters in the area. A 15 year study in Montana showed that most hunters hunting on foot seldom travel more than 1-1/2 miles from a road. (Stalling, 1996) A reduction in roads open to motorized travel tends to reduce the number of hunters and reduces the harvest of bull elk. This in turn could produce larger bulls in the population. The elk tended to stay longer in roadless areas before going to private land, where access was strictly controlled and actually increased the overall hunter success.

In analyzing important elk habitat areas and their relation to the transportation systems, only one area (elk severe winter range) exceeds the road density threshold of 2 miles per square mile of roads (see Map 19). In Alternative 1, the road density for this area, located near Dry Lake north of Gypsum, has 5.3 miles of BLM-administered roads per square mile. In the Alternative 4, this same elk severe winter range area has decreased to 0.2 miles of BLM roads. In Alternative 5, the same area has a road density of 2.7, primarily as a result

of the additional roads designated for motorized travel within the Gypsum Hills Special Recreation Management Area. In Alternative 5, this area of severe winter range would not be closed to motorized travel during the winter months. However, the area lies near the southern portion of Bull Gulch WSA which offers solitude year-round from motorized users. This area would be monitored to see if a slight change in the winter closure area is warranted to protect the wintering elk.

Both alternative 4 and 5 would sharply reduce impacts to elk. The reduced motorized access to Black Mountain and Castle Peak would reduce hunter pressure and harassment during the fall. Both alternatives would reduce harassment during the critical winter periods when compared to alternative 1. Alternative 5 would have the lowest impact because of the winter closures on Winter Ridge to all motorized vehicles. The proposed winter closure point in Alternative 5 along the Winter Ridge Road east of Burns would further reduce harassment of wintering elk. This road would be opened for year-round motorized travel in Alternatives 1 and 4.

Elk are the only wildlife species of note that can tolerate snow depth enough to make snowmobile use a potential conflict with them. Because of the terrain, snow depth, and vegetation, snowmobile use is not a factor in elk winter areas. The rough terrain and heavy sagebrush stands confine nearly all snowmobile use to existing roads. The only place where snow becomes deep enough in most years to enjoy snowmobiling is in the upper Milk Creek Basin. All of that area, with the exception of the WSA, is open to snowmobiles (see Map 11). Elsewhere a combination of tall sagebrush, steep terrain and lack of snow, make it a poor area for snowmobiling.

Deer.

In the areas where hiding and thermal cover is very low, like sagebrush flats and gentle hillsides, motorized transportation has an increasingly negative effect on deer. The sagebrush habitat type represents a significant portion of the northeast part of the planning unit. The northwest and southern portions tend to be dominated by pinon-juniper vegetation which provides more hiding cover for deer. It becomes easier to find and harvest deer during the hunting season in low cover areas. Hunters on ATVs and 4x4 vehicles can more thoroughly search these large areas to locate and harvest deer. This results in a decrease in the number of mature bucks that survive the hunting season.

Alternative 1 will have a high impact on deer (see Map 20). The large number of existing roads and the lack of any off road restrictions makes it very easy for hunters to thoroughly scout the areas deer tend to frequent during the hunting seasons. This is evidenced by the buck-doe ratio of 1.5 mature bucks per 100 does after the 1996 season. (CDOW, 1997) Motorized use within the deer wintering areas in the northern part of the planning unit is limited mostly to lion hunters who access them by vehicle or snowmobile. Lion hunting is quite competitive leading to a large number of hunters out after every snowfall. The length of this use is usually short as the quota of 3 lions is taken quickly.

Summer use under all three alternatives will have essentially the same low impact to deer. Vehicle use in the southwest quadrant will be highest under Alternative 1 and lowest under Alternative 4 with Alternative 5 falling in the middle. This area has a high proportion of pinon-juniper stands and generally rough terrain. This provides visual cover for deer from

motorized use on the roads and trails in the area. The Pisgah Mountain area receives very low summer recreational use for several reasons. It is difficult to reach, and has very little available water. Castle Peak receives quite heavy recreational use, but it is mostly road touring. The terrain and timber provide visual cover for the deer.

Alternative 1 will have a high impact to wintering deer. All of the wintering areas and severe concentration areas are available to the public on motorized transportation. If there is little snow, the public can and will access these areas via 4x4 vehicles and ATVs to view deer. When snow begins to limit vehicles, the viewing public switches to snowmobiles. This is precisely the wrong time to be driving among the deer. Cold temperatures and wind usually put more stress on deer than snow until the snow depth begins to exceed 12 inches.

Alternatives 4 and 5 will both have low impact on deer. Under Alternative 4, Winter Ridge is open to motorized use year-round but this will mostly be snowmobile use because drifts will close the road to vehicles. Because of its location, it is hard to see much from the road and thus its use by vehicles is low after the hunting season. Snowmobile use would be limited to the road where the impact to deer would be low compared to cross country travel which would be high. Under Alternative 5 all motorized access would be restricted during the winter (see Map 11). Closure of the sagebrush basin north of Black Mountain would be very beneficial to deer. This is a large basin with a minimal amount of hiding cover. The rest of the winter range along the river is essentially un-roaded.

The Pisgah Mountain area would be treated the same under Alternatives 4 and 5 where the impact to deer is low. The impact to hunters will be high because they will not be able to drive into the Pisgah Mountain area during hunting seasons. During the fall and winter, travel will be restricted to non-motorized access. It can easily be accessed by foot or horseback from the county road on Alkali Creek. The north side of Pisgah Mountain can be accessed from the Colorado River Road and fording the river or crossing in a boat. There are several fords useable for horses. Under Alternative 4, the road to Domantle would be closed to motorized during the hunting season, but under Alternative 5 it would be open for motorized use. Under Alternative 4, the road from Alkali Creek to Milk Creek is open during the hunting season but closed under Alternative 5.

There is a big difference between Alternatives 4 and 5 in the southwest portion of the planning unit. In Alternative 4 most of the spur roads east of Dry lake are closed to motorized travel with one main access road (Agnew Gulch and Cottonwood Creek) remaining open to motorized use. In Alternative 5 most of the roads in the Dry Lake/Gypsum Hills area are open to motorized travel with a winter travel restriction placed on the Cottonwood Creek Basin. The overall impact to deer would probably be low under both alternatives because the area is heavily forested with pinon-juniper providing hiding and thermal cover. Alternative 5 would have the lowest impact to deer because vehicle access would be restricted within the winter concentration areas.

Visual Resource Management

In Alternative 1, the visual impact of new trails and off highway vehicle use areas which have become established is noticeable in localized areas along important travel routes near

Bocco Mountain, Blue Hill, Big McCloskey Trail and Road Gulch north of Gypsum. The visual contrast of some of the trails on exposed slopes is moderate to high, attracts attention, and exceeds VRM objectives. With the possible increase in new trails and off road vehicle use under current travel management 'Open' designations, the visual impact on important scenic values will increase in areas already affected, and spread onto areas where impacts are not evident. This is likely to result in a gradual deterioration of scenic quality in 'Open' areas along important scenic corridors.

In Alternatives 4 and 5, the visual impacts are essentially the same. The visual impact of spreading trails, hill climbing tracks, and cross country vehicle use will be prevented by limiting motorized travel to designated routes. Possible development of new trails or OHV use areas would be planned to avoid visual impacts, and deterioration of scenic values will be prevented. Closing and reclaiming existing routes in the WSAs will restore the natural landscape character in the affected corridors in the long term. The reclamation work will cause short term visual impacts which will be noticeable from the immediate vicinity due to the rough ground created by the ripping and the change in groundcover for revegetation treatment. Over time, the rough ground will smooth out and the vegetation will blend in with surrounding cover as shrub species become established. Signing and planned gates and traffic control barriers required to implement the travel management plan will introduce localized visual impacts which will be noticeable and attract attention from the immediate vicinity along the vehicle travel routes. However, these impacts will be subordinate to the overall landscape character and consistent with VRM objectives.

Cultural Resources

A major potential impact to cultural resources consists of surface-disturbing activities in areas where inventories have not been conducted, and thus no protective measures are in place. Information derived from current research indicates that other important cultural and historic properties may be present which have not yet been discovered in the planning area. Such unprotected sites could be impacted if surface-disturbing activities occur prior to on-the-ground surveys. The extent and number of sites which have sustained impacts is largely unknown due to the amount of unsurveyed terrain. However, it is likely that sites may have already been impacted and more would be affected in the future.

A survey for cultural and historic sites will be conducted prior to any new road or trail construction or other surface-disturbing improvements throughout the planning area. Future impacts to cultural sites would be mitigated through appropriate measures, which could include controlled and systematic data recovery, excavation, comparative analysis, or avoidance. All mitigative measures are determined in consultation with State Historic Preservation Officer.

Alternative 4 would provide the most protection for unknown cultural resources by closing a substantial number of roads and prohibiting cross-country travel. Alternative 1 provides the least protection since new roads and trails can be established under the current travel designations which allow cross-country motorized travel. Alternative 5 provides slightly less protection than Alternative 4 due to a more extensive road network, although Alternative 5 does prohibit cross-country travel while providing for OHV use in a managed setting within the SRMAs.

Since documented cultural properties exist within the SRMA boundaries, the BLM will attempt to inventory the areas contingent on the availability of funding. Priorities for inventory will focus on the Bocco Mountain SRMA since the majority of routes were constructed in an unmanaged setting where surveys were not conducted. Within the Gypsum Hills SRMA, priority for survey will focus on new roads or trails. Adjustments to approved road and trail systems could be made based on the inventory results.

Native American concerns will be addressed through a formal consultation process which has already been initiated. Tribal representatives from the Northern Ute Tribe in Ft. Duchesne, Utah, have been apprised of the plan and are involved with the planning process.

Recreation

Travel and recreation opportunity classes in Alternative 1, shown on Maps 1 and 3 respectively, would continue to emphasize motorized access and motorized recreation opportunities and activities throughout most of the planning unit. Public land would be managed to provide non-motorized recreation opportunities on only 6% of the public land acreage.

Approximately 288 miles of BLM routes would be available for motorized travel, sightseeing, access to hunting and other dispersed recreation opportunities. Approximately 48 miles of county road would also be available. Most of the BLM routes and some of the county roads would continue to be passable by 4x4 vehicles most of the time.

Opportunities for vehicle use on and off the roads and trails would continue to be available on approximately 73,936 acres, or 62% of the public lands in the planning unit, while over 112,293 acres, or 94%, would be available for motorized recreation opportunities, with few limitations. With growing public use, the number of routes on public land and related impacts on resources would continue to grow.

Approximately 32 miles of existing non-motorized trails would be available for hiking and horseback riding in non-motorized setting, mainly in the Castle Peak WSA. However, these non-motorized settings would not be preserved by current management designations. Public lands which still have non-motorized setting qualities will gradually shift to Semi-Primitive Motorized qualities as public use increases and possible management actions are taken to provide for such use.

Mountain biking opportunities would continue to be available on all motorized and non-motorized routes on public land. Mountain biking would also be available off the roads and trails throughout the planning unit.

Moto-cross and hill climbing opportunities on public land would continue un-managed in areas established by users. Existing hill climbing areas, moto-cross tracks and motorcycle riding trails would continue to be available for use and new use areas are likely to become established wherever users chose. Inadvertent impacts on resources may occur from spreading trails and intensive use areas.

Conflicts between people seeking motorized hunting experiences and those preferring non-motorized experiences would continue, particularly in areas with non-motorized qualities which are open to motorized travel.

Nearly all of the area would continue 'Open' to motor vehicle use during the winter, including snowmobiling, except for approximately 9,839 acres in the Bull Gulch WSA. The only limitation on motorized travel would be the weather and snow conditions. The extensive system of routes available for motorized travel would provide access to dispersed recreation opportunities for persons with disabilities, along with everyone else, throughout most of the public lands in the planning area. Opportunities for motorized travel off the roads and trails would enable persons with mobility impairments to experience settings and participate in activities as far away from the roads as the individual's ability, equipment or vehicle, or terrain allows.

Table 11. Recreation Opportunity Classes

Recreation Management Class	Alternative 1 (Current Management) (Acres)	Alternative 4 (Acres)	Alternative 5 (Revised Proposed Action) (Acres)
Semi-Primitive, Non-Motorized	7,296	28,289	29,139
Semi-Primitive, Motorized	86,619	58,942	59,245
Semi-Primitive, Motorized (Summer)	NA	3,703	2,550
Roaded Natural	21,087	24,314	24,314
Semi-Urban	4,586	4,309	4,309
Urban	1	34	34

Travel and recreation opportunity classes in Alternative 4 would emphasize preserving or enhancing non-motorized recreation opportunities where they are presently available, while continuing to provide motorized opportunities throughout the planning unit. Motorized access would be provided on 76% of the area. Motorized activities within the Intensive OHV Use Areas at Bocco Mountain and Blowout Mountain would occur on designated routes (10% of the area). Non-motorized activities would be emphasized on 24% of the area.

The Recreation Opportunity Spectrum (ROS) classes shown on Map 8 would be adopted, and supported by the travel designations shown on Map 6. As shown in Table 11, the proposed ROS classes would increase the area under Semi-Primitive Non-Motorized to 28,289 acres, and decrease the Semi-Primitive Motorized areas to 62,645 acres. The

areas classified as Roaded Natural would increase by about 15%, mainly due to the influence of residential development near public lands over the last 10 years. Lands under Urban, Semi-Urban or Rural class would remain essentially unchanged.

Approximately 128 miles of BLM routes would be available for motorized vehicle use during the summer, and 101 miles during the big game rifle hunting seasons. Approximately 48 miles of county roads would also be available for motorized travel.

Approximately 192 miles of routes would be available for non-motorized use during the summer, and 204 miles during the big game rifle hunting seasons. Mountain biking opportunities would be available on all motorized and non-motorized routes on public land, but would be lost on approximately 12.6 miles of trails within the WSAs. Mountain bikes may be prohibited on the single track motorcycle riding trails in the Bocco Mountain area if warranted by use levels and conflicts with motorcycle use.

Moto-cross and hill climbing opportunities on public land would be lost in the Blue Hill riding area and around Big McCloskey Trail near the Colorado River. However, opportunities for these activities and motorcycle riding would be available in the Bocco Mountain Area near Wolcott and the Blowout Mountain area northwest of Gypsum. Approximately 12,539 acres of BLM land in these two areas would be managed to meet present and future demand for motorcycle and ATV riding activities, mitigate resource damage concerns and reduce conflicts with other uses. Additional riding trails and related facilities may be developed, or existing routes may be relocated or closed to meet these objectives, which would cause localized impacts that will be addressed by future project planning and environmental assessment. OHV use will likely increase as public awareness of opportunities spreads.

Motorized sightseeing opportunities on routes with public access would be preserved throughout most of the planning unit, providing access to a variety of scenery and scenic overlooks. The Stagecoach Road near Pisgah Mountain and the Domantle Road would only be available for motorized travel during the summer (5/1 through 9/30). Vehicle access would also be provided to high quality forested settings in the Norman Creek and Little Dutton Spring area during the summer (5/1 through 9/30). Motor vehicle access would be lost to a popular scenic overlook on Picture Ridge.

Vehicle access to most of the existing roadside hunter camps would be preserved. Opportunities for roadside camping would be lost along roadways within the WSAs. The loss of roadside campsites may lead to establishment of new campsites in the vicinity by displaced camper groups.

Vehicle access to the camping area along the Colorado River west of State Bridge would be lost, but non-motorized public and administrative vehicle access would be maintained. A parking area and trailhead would be provided at or near the intersection, and permission from the Colorado Department of Transportation for locating this facility in the Highway 131 right-of-way, or an easement on the private land would be required.

Motor vehicle access, including snowmobiling opportunities, would be lost throughout much of the planning area during the winter due to the seasonal wildlife habitat restriction between December 1 and April 30. Approximately 85 miles of BLM route and 48 miles of

County road would be available for motorized travel during the winter closure period. However, public lands closed to vehicle use during the winter would continue to be available for public use by non-motorized travel. Snowmobiling opportunities would be available on approximately 54,972 acres, but most of this country does not provide good unconfined snowmobiling opportunities due to elevation, topography and vegetation. Vehicle access would be available beyond 12/1 in the winter closure areas as long as CDOW continues a late season elk hunt to facilitate harvest. Mountain lion hunters would be limited to non-motorized access during the winter.

Vehicle access to most of the public lands during the big game hunting season would be available. Opportunities for non-motorized hunting would be increased in the Castle Peak and Bull Gulch WSAs, Black Mountain, Pisgah Mountain and Windy Point areas. Conflicts between motorized and non-motorized hunters will be reduced in these areas.

The designated system of routes available for motorized travel would provide access for persons with disabilities to most of the dispersed recreation opportunities and types of settings. Access to recreation settings or activities away from the roads would be lost, and persons with mobility impairments would be largely confined to the immediate vicinity of motorized travel routes. Back country settings away from roads would only be available by horseback or other non-motorized travel. Non-motorized trails are not planned to meet accessibility standards for wheelchairs.

Recreation management under Alternative 5 would be similar to Alternative 4, except for some adjustments in the motorized routes made to preserve important motorized recreation opportunities.

The ROS classes shown on Map 12 would be adopted, and supported by the travel designations on Map 9. The acreage under Semi-Primitive Non-Motorized classification would be increased 850 acres totalling 29,139 acres, with a like decrease in the Semi-Primitive Motorized areas to 61,795 acres (see Table 11). The areas classified as Roaded Natural, Urban, Semi-Urban or Rural class would be the same as Alternative 4. Appendix 10 also provides some guidance related to future recreation use capacities for the area.

Motorized access would be maintained for dispersed recreation activities in a variety of recreation settings. Approximately 180 miles of BLM routes would be available for motorized vehicle use during the summer, and 173 miles during the big game hunting season.

Approximately 140 miles of non-motorized route would be available for non-motorized use during the summer, and 147 miles during the big game hunting season. Mountain biking opportunities would be similar to those under Alternative 4.

Moto-cross and hill climbing opportunities on public land would be similar to those under Alternative 4, yet the Gypsum Hills SRMA would be expanded nearly 5800 acres. Approximately 18,326 acres in the Bocca Mountain and Gypsum Hills SRMAs would be managed to meet present and future demand for motorcycle and ATV riding activities, mitigate resource damage concerns and reduce conflicts with other users.

Sightseeing opportunities would be similar to those under Alternative 4, except that vehicle access would be provided to the Picture Ridge overlook, and the Domantle route would be available for vehicle travel during the fall as well as during the summer.

Motorized camping opportunities would be similar to those under Alternative 4, except that vehicle access would not be provided in the Norman Creek and Little Dutton Spring area, and campsites in the Domantle area would be available in the fall as well as the summer.

Vehicle access to most of the public lands during the big game hunting season would be maintained. Opportunities for non-motorized hunting would be increased in the Castle Peak and Bull Gulch WSAs, Black Mountain, Pisgah Mountain and Windy Point areas. Conflicts between motorized and non-motorized hunters will be reduced in these areas.

Motor vehicle access, including snowmobiling opportunities, would be lost throughout much of the planning area during the winter due to the seasonal wildlife habitat restriction between December 1 and April 30. Approximately 108 miles of BLM route and 48 miles of County road would be available for motorized travel during the winter closure period. However, public lands closed to vehicle use during the winter would continue to be available for public use by non-motorized travel. Snowmobiling opportunities would be available on approximately 38,290 acres, but most of this country does not provide good unconfined snowmobiling opportunities due to elevation, topography and vegetation. Vehicle access would be available beyond 12/1 in the winter closure areas as long as CDOW continues a late season elk hunt to facilitate harvest. Mountain lion hunters would be limited to non-motorized access during the winter

Access for persons with mobility impairments would be similar access under Alternative 4. Recreation opportunities and settings away from roads would only be accessible by non-motorized travel.

Wilderness

The management objective for the WSAs under all alternatives is to establish travel management designations consistent with interim management policy for WSAs.

In Alternative 1, approximately 3.6 miles of road and 9 miles of road would continue to be available in the Castle Peak and Bull Gulch WSAs, respectively, for motorized travel.

Wilderness values would be threatened or impaired in those portions of the WSAs affected by the presence of roadways and related use of motorized vehicles. Wilderness values would be preserved in portion of the Bull Gulch WSA by the current 'Closed' designation. Wilderness values in the portion of the Bull Gulch WSA designated 'Open' would continue to be threatened by possible off road travel.

Mountain biking would continue to be allowed in the WSA's, although this would be inconsistent with Wilderness Interim Policy which is aimed at minimizing new discretionary uses which would be incompatible with possible wilderness designation.

Approximately 10 miles of roadway would continue to be available for motorized travel

within the Conservationists' proposed addition to the Castle Peak WSA, which would be incompatible with wilderness designation. The roadways would need to be closed or cherry-stemmed if the Conservationist's proposed wilderness is designated by Congress.

In Alternative 4, wilderness values would be preserved in the Bull Gulch and Castle Peak WSAs by the 'Closed' designation, and by the Semi-Primitive Non-Motorized recreation management classification. Approximately 13 miles of roadway in the WSAs would be obliterated and reclaimed to natural conditions as much as possible.

Opportunities for use of motorized vehicles and mountain bicycles on the roadways and trails within the WSAs would be lost.

Use of a dozer or other earthmoving equipment would be required for reclamation work in the WSAs, and the short term impact of roadway obliteration and rehabilitation would be noticeable.

Approximately 6 miles of roadway would continue to be available for motorized travel within the area Conservationists' proposed for addition to the Castle Peak WSA, which would be incompatible with wilderness designation. However, the roadways could be closed or cherry-stemmed if the Conservationist's proposed wilderness is designated by Congress.

In Alternative 5, wilderness values would be preserved in the Bull Gulch and Castle Peak WSAs by the 'Closed' designations, and by the Semi-Primitive Non-Motorized recreation management classification. Approximately 13 miles of roadway in the WSAs would be obliterated and reclaimed to natural conditions as much as possible.

Opportunities for use of motorized vehicles and mountain bicycles on roadways and trails within the WSAs would be lost.

Use of a dozer or other earthmoving equipment would be required for reclamation work in the WSAs, and the short term impact of roadway obliteration and rehabilitation would be noticeable.

Approximately 3.2 miles of roadway would continue to be available for motorized travel within the area Conservationists' proposed for addition to the Castle Peak WSA, which would be incompatible with wilderness designation. However, the roadways could be closed or cherry-stemmed if the Conservationist's proposed wilderness is designated by Congress.

What about the effects of non-motorized travel?

The previous discussions of environmental effects have focused primarily on visitor use associated with motorized travel. As mentioned, non-motorized travel is not without environmental effects, but such impacts are generally more localized and relatively insignificant in the planning area compared to the impacts of motorized use. This is expected to be true even with an increases in non-motorized use that might occur after implementation of the travel plan.

Primary environmental effects attributed to non-motorized use include gullyng and erosion of trails and disturbance of wildlife. Provided high use trails are maintained to minimal levels and use rates in critical habitats during winter periods is not excessive, soil erosion and harassment of wildlife resulting from non-motorized travel is expected to be minimal. Based on field observations, some non-motorized routes may need to be closed or subjected to increased maintenance if erosion rates are unacceptable. Portions of critical winter habitats for big game could be closed to non-motorized uses as well if use levels get too high and unacceptable impacts to deer and elk are noted.

Mountain bikes would be permitted on all routes designated for motorized or non-motorized travel, except in the WSAs. Mountain bike use can cause gullyng and erosion of trails and sometimes leads to conflicts with other users, especially horse back riders. The extent of these impacts is dependent primarily on the amount and season of use. The environmental effects of mountain bikes are expected to be negligible on those routes designated for motorized travel. Some moderate amount of gullyng and soil erosion is expected on non-motorized routes outside the WSA. Few conflicts with other non-motorized users are anticipated because the WSAs provide ample opportunities for hiking and horse back riding away from mountain bikes.

Horse back riding continues to be unrestricted throughout the planning area. Horse use can cause gullyng and erosion of trails and sometimes leads to conflicts with other users, especially mountain bikers and hikers. The extent of these impacts is dependent primarily on the amount and season of use. The environmental effects of horse back riding is expected to be negligible throughout the planning area except for along trails leading to popular hunting camps. Horse pastures and feeding areas are often trampled, usually to mud, and overgrazed. With repeated use such areas can become infested with weeds, often noxious weeds, brought in with the horse feed. The travel plan is likely to lead to increased horse use during the hunting season, resulting in an increase in damage to small, localized areas. The BLM has recently implemented a weed free hay policy, which should help reduce the impacts of noxious weeds, but vegetation damage to those areas around the hunting camps is expected to continue. Since most horse use will occur during the hunting season and since many hikers and mountain bikers will avoid the hunting areas during this season, conflicts between users are likely to be minor.

Hiking or snowshoeing continues to be unrestricted throughout the planning area. Such use has relatively little impact overall, but soil erosion can occur on hiking trails and local vegetation, especially riparian, can be damaged from camping in sensitive area. Some soils in the planning area are so sensitive that simply walking over them destroys their protective crust. Hiking on such soils is not expected to be of sufficient intensity to warrant any special attention, as such soils tend to be away from the terrain preferred by most hikers. If hiking or snowshoeing through critical winter habitats reaches unlikely use levels, wildlife could be displaced and habitat corridors could be disrupted.

What are the indirect environmental effects?

Indirect environmental effects are secondary impacts resulting from implementation of the proposed plan or one of the alternatives. Such impacts are sometimes difficult to predict and hard to measure. It appears the primary types of indirect effects can be categorized

as: (1) displacement of visitors, (2) change in visitor preferences, (3) change in the amounts of visitor use, (4) increase in violations of laws and regulations, (5) change in public expectations, and (6) increase in management costs. Though there are some obvious differences between Alternatives 4 and 5, the differences in possible indirect effects between the two alternatives would be too hard to distinguish since they are so similar in concept. Therefore, for purposes of discussion, this section will focus on how the potential indirect effects of the plan might differ between the current situation (Alternative 1) and the Revised Travel Management Plan (Alternative 5).

Displacement of visitors. Visitors who prefer motorized recreation opportunities may be displaced from portions of the planning area at certain times of the year. Those visitors might move to other parts of the planning area or chose to find other public lands, either BLM or National Forest lands, resulting in increased visitor use in those areas. Depending on the nature of the lands to which visitors to Castle Peak might be displaced, the environmental effects of this displacement could range from negligible to a slight increase in environmental degradation to visual, soils, watersheds, and wildlife habitats in those areas. Given that the Castle Peak travel plan, especially those areas to be designated as Special Recreation Management Areas (SRMA), largely accommodates motorized recreation during the summer, the most noticeable displacement is likely to be during hunting season of hunters who prefer to be able to drive further into their favorite hunting spot, use their ATVs to scout deer and elk, or are physically unable to hike or pack out game. It is also likely that nearby public lands in the Eagle and Gypsum areas will see an increase in use by visitors looking for a place to ride their motorcycles, ATVs or 4X4 vehicles during the winter and spring since portions of the SRMAs in the Castle Peak planning area will be closed at that time. Since public lands around Eagle and Gypsum are similar in character to lands in the Castle Peak area, it is likely that increases in motorized use on those lands would result in slight to moderate increases in damage to visual, soil, watershed and wildlife resources. For example, the public and private lands just east of the Town of Eagle which are currently being used for OHV driving, will likely experience a slight increase in use and the rate of development by the users of new routes will likely increase slightly. This could lead to increased conflicts between the users and the growing number of residents of nearby subdivisions as well as an increase in degradation to visual resources as seen from Interstate 70 and nearby homes.

Change in visitor preferences. With an increase in the amount of primitive, non-motorized recreation opportunities to be made available on public lands in the Castle Peak area, a moderate increase in visitors who prefer to mountain bike, hike, horse back ride, and cross country ski is expected. For example, about 15,000 acres of public lands on King Mountain, just north of the Castle Peak planning area, have been available for non-motorized recreation since 1992, when a land exchange was completed which opened public access to the area. Public use of the area has increased at a moderate pace since and the area has become a regional draw for hunters who prefer a more primitive hunting experience. Any increase in visitation would likely be offset somewhat by those who would be displaced as described above.

Designation of the Gypsum Hills and Bocco Mountain SRMA will likely result in a moderate increase in the amount of use in these areas. Riding OHVs, 4X4 and motorcycles is a growing sport and enthusiasts are looking for places to enjoy their riding. The SRMAs will

provide fun, challenging riding opportunities. BLM will promote the areas for such use and provide visitor maps. Provided users of these areas stay on the approved routes, impacts to visual, soil, watershed and wildlife resources from this increase in use are still likely to be less compared to the current situation, though a slight increase in conflict between the users and livestock permittees could be expected.

Change in the amounts of visitor use. While the types of public use might shift as described above, overall visitation to the Castle Peak planning area is expected to increase moderately and at a steady pace. This is due primarily to the tremendous local population increases and the increasing public demand for outdoor recreation opportunities. No significant change in the amount of public use is expected for any alternative. Appendix 10 provides some guidance related to future recreation use capacities for the area.

Increase in violations of laws and regulations. It is possible that the implementation of the Castle Peak travel plan could result, especially in the short term, in an increase in violations of hunting laws, vandalism to signs and facilities and disregard for the new travel regulations. Those dissatisfied with the plan decisions, or unaware of the new regulations when they arrive for their fall hunting trip, are the most likely to resort to such behavior, though there is a small group of uncaring visitors who will disrespect public property for no apparent reason. Such indirect effects are expected to be minor and relatively short term, with generally little impact to visual, soil, watershed and wildlife resources and most impact to the visitors themselves, the BLM and the taxpayer. Most noticeable will be vandalism to signs. With over 250 signs, bulletin boards and route markers, needed to implement this plan, the costs to replace or repair vandalized public property in the area could amount to over a \$2000 per year.

Change in public expectations. With a new plan, new maps, new rules, new signs and increased public awareness of these public lands resulting from the Castle Peak plan, there will be an increase in the public's expectation that BLM will enforce the new rules, keep the signs up, provide good maps and respond to public reports of violations. There might also be expectations that BLM conduct similar planning efforts on other public lands. These expectations are reasonable. While BLM will attempt to satisfy these expectations, BLM will not be as successful as many might prefer, resulting in disappointment, frustration and dissatisfaction for some.

Increase in management costs. Implementation of the Castle Peak Travel Management Plan and enforcement of resulting new travel regulations will result in higher management costs for the area. Projects planned in 1997 and 1998 include purchasing and installing needed gates and barricades, rehabilitating roads in the WSAs, rerouting portions of unacceptable routes, installing necessary culverts and purchasing and installing necessary signs. These costs are estimated to be \$20,000. Increased field presence by BLM personnel will also be necessary. No increase in funding is expected, so BLM will shift available funds and personnel to the Castle Peak area, especially over the next 3 to 5 years. This will result in less management attention elsewhere and BLM expects a slight increase in visitor complaints from other portions of the resource area. There will be no real difference in costs to maintain the system of routes, as the present road maintenance schedule would remain largely unchanged. Refer to Chapter 6, Implementation, for more information on planned maintenance and Table 12 for more information on maintenance

schedules.

What are the cumulative environmental effects?

Cumulative effects of the proposed action can be categorized as follows: (1) Improvements to land health and (2) decrease in motorized recreation opportunities.

Since 1990, the BLM has implemented several decisions to restrict travel on public lands in the area to protect resource values, including King Mountain, Siloam Springs at the east end of Glenwood Canyon, and Fisher Creek near Glenwood Springs. In addition, BLM issued a rule, to be implemented depending on weather and road conditions on a year to year basis, to restrict certain roads to non-motorized uses during spring thaw to protect roads from excessive rutting. See the BLM office for more information in these restrictions. The Castle Peak plan is consistent with a general trend to manage a transportation system and restrict use of that system to protect other resource values. The Grand Mesa/Umpcompaghre National Forest near Grand Junction is preparing a Forest Plan which limits motorized travel in portions of the National Forest. The local White River National Forest is revising their Forest Plan and travel management has been identified as a topic for consideration in that plan.

Improvements to land health. In general, shifting public use of public lands with critical habitats, erosive soils, important watersheds and high visual and wilderness values from motorized uses to less intensive, non-motorized uses will result in less resource damage and may lead to improvements in land health.

The cumulative effect of the travel plan on various species of wildlife is an overall reduction in the level of interaction between humans and wildlife and an associated decrease in the level of human-caused stress and harassment of wildlife. This results from the decrease in the amount of motorized routes people can use to access the Castle Peak Area, especially during the hunting season and the critical winter months, or the selection of routes that avoid or minimize conflicts with important habitats. Reducing human and wildlife interaction could result in an increase in the survival rates of most species of wildlife in the planning area, though this increase might be hard to measure. Big game are the most likely wildlife species to be affected by the travel plan.

Regarding big game, it is possible that a decrease in the harvest rates of deer and elk might occur, at least in the short term, because limiting access to the area may result in fewer hunters. However, it is also likely that hunters that prefer a more primitive setting, with fewer motor vehicles, will soon displace those who prefer to hunt with easier access and the overall impact on the numbers of hunters may be minimal. Hunting success is expected to improve over the long term as more mature animals gradually make up a larger percentage of the big game population. It is possible, but largely unproven, that big game animals will benefit from an overall population health standpoint with a higher percentage of mature males in the population. This has many long term ramifications on herd health which are only recently being recognized. For example, if there are more mature male animals to breed, the period of birthing could become shorter in the spring because the females would be bred quicker in the fall. This gives the young more time to grow and be better prepared to survive the winter. Animals born later in the summer have

a very low survival rate during the ensuing winter.

During the winter season, big game are better able to access wintering areas and occupy those areas longer when the stress and harassment from people is reduced, thus the winter restrictions should lead to greater winter survival of deer and elk.

The designation of the SRMAs will result in an increase in the use of roads and trails in sage grouse habitat and an increase in the level of human presence in those areas. Such use might result in additional loss of sage grouse habitat or could impact the sage grouse directly during critical periods. These impacts are expected to be minimal at this time because sage grouse are only seen periodically in the area and no known active lek sites exist. Additionally, management objectives for the SRMAs are designed to minimize additional loss of sage grouse habitat. If sage grouse are observed in the area, BLM will consult with CDOW to take appropriate measures to minimize conflicts between visitors to the SRMA, sage grouse and sage grouse habitat.

Decrease in motorized recreation opportunities. In general, this plan continues a trend to more closely regulate travel on public lands, often resulting in more restrictions to off road, cross country travel and fewer opportunities to drive where some want to drive.

The most significant trend affecting resources in the Castle Peak area is population growth, both outside and within the planning area. While the travel plan is expected to provide a reasonable level of protection to soils, watersheds, wildlife and natural habitats, development patterns on private lands could indirectly affect BLM's ability to protect these values. Public land use levels could increase dramatically, wildlife migration corridors could be disrupted, and important habitats could be damaged, affecting the overall ecological integrity of the area.

What are the social and economic effects?

Social and economic effects could be categorized as follows: (1) recreation impacts on the local economy, (2) effects on attitudes and culture, (3) effects on communities or neighborhoods.

Recreation impacts on the local economy. Both the Eagle County Master Plan and the Eagle Area Community Plan acknowledge the very dramatic economic impacts of recreation and tourism on local economies and the importance of nearby public lands to the quality of life as well as the source of much of the tourism and recreation opportunities.

The public lands in the Castle Peak and the recreation opportunities they provide contribute an unknown, but probably not insignificant, amount towards the quality of life and recreation base in the area, primarily attributed to hunting and driving 4X4 vehicles and ATVs. However, tourism associated with the ski industry and nearby summer resorts so dramatically influences the local economy that the Castle Peak travel plan is not expected to have any noticeable effect on local economies. The impact of the Castle Peak travel plan on individual businesses, such as hunting outfitters or 4X4 vehicle or ATV suppliers, is unknown. It is possible that hunting outfitters will see a slight increase in demand as more non-motorized hunting opportunities would become available. The designation of the

Gypsum Hills and Bocco Mountain SRMAs could have a similar effect on local businesses catering to such visitors.

Effects on attitudes and culture. With implementation of the travel plan, some visitors will feel more restricted and feel less "freedom" to use public lands in traditional ways. Such values are very important to some people, especially those with a history of using public lands or those living adjacent to public lands.

In addition some families, or groups of friends, have come to the Castle Peak area to camp or hunt for many years, establishing traditions that have become very important to them. Implementing the plan may disrupt these traditions if such users could not enjoy themselves consistent with their traditions. Some visitors might not be affected, depending on their camp locations and recreation preferences, others will adapt and start new traditions, while others will simply be displaced to other areas.

Effects on communities or neighborhoods. Some residents of the towns of Eagle, Gypsum and Vail, or communities at Dotsero, Burns, McCoy and Bond have come to expect ready access and rather unlimited use of BLM lands in their "backyard". Implementation of the travel plan will limit some of their options for recreation, especially the notion of jumping on their 4X4 vehicle, on a motorcycle or ATV and accessing a BLM trail off their driveway or a county road, with no transporting of the machine to designated areas necessary. While motorized recreation opportunities would still be available, especially during the summer months, some community residents will be inconvenienced by closures of some areas to off road travel or seasonal closures which would force them to travel elsewhere to enjoy riding their machines.

Chapter 6

Implementation

Alternative 5, Revised Proposed Action outlines numerous changes in travel designations and the transportation system. This chapter will describe specific projects, mitigation measures, and proposed timeframes to implement the projects. After approval, various tasks would be completed to implement the plan. Initially, special rules (Travel Notice) would be published in the Federal Register and local newspapers that formally specify the travel management changes described in this plan (see Appendix 8, Draft Travel Notice). Contracts would be written and issued to complete many on-the-ground jobs. Map 24 illustrates the projects to be implemented. Specific description of the tasks to be completed for plan implementation follows.

Projects are listed in the order of their intended implementation priority in this chapter. Due to unforeseen conditions such as contract awards, weather or funding, priorities for implementing the projects could change. Should a change occur in implementation priorities, it will be noted as a maintenance change of the plan.

Projects Related to Travel Designation Changes

1. Physically close and rehabilitate roads (6 routes/ 7.0 miles) within Bull Gulch WSA

Objective: Scarify the existing road surface to create an adequate seed bed and inhibit vehicle travel along the route; apply seed to promote vegetative establishment.

Work: Using a small dozer (D-4), road surface will be ripped to minimum depth of 18" as needed. Initial 500 feet of road would be treated to inhibit motorized travel from nearby designated travel routes. Water bars would be constructed as needed. Ripped segments would be broadcast-seeded with appropriate certified seed mix for vegetation type. Road closure signs would be posted at the junction with designated travel routes. Where possible, gates in range fence will be removed by stringing wire across opening to inhibit motorized travel onto rehab route. If this is done, bypass gates could be constructed to allow foot and horseback access only through the fence.

2. Physically close and rehabilitate roads (1 route / 0.6 mile) within Castle Peak WSA.

Objective: Scarify the existing road surface to create an adequate seed bed and inhibit vehicle travel along the route; apply seed to promote vegetative establishment.

Work: Using a small dozer (D-4), road surface will be ripped to minimum depth of 18" as needed. The entire length of Poison Trail would be ripped; however, only one track of the 2-track route would be treated providing a trail surface along the untreated track. Water bars would be constructed as needed. Ripped segments would be broadcast-seeded with appropriate certified seed mix for vegetation type. Road closure signs would be posted at the junction with designated travel routes. The existing gate in the range fence at the WSA boundary could be removed by stringing wire across the opening to inhibit motorized travel onto the rehabilitated route. If this is done, bypass gates would be constructed, as needed,

to allow foot and horseback access only through the fence.

3. Physically close and rehabilitate roads (5 routes/ 2.9 miles) within Bor Flats in the Big Alkali Creek drainage.

Objective: Scarify the existing road surface to create an adequate seed bed and inhibit vehicle travel along the route; apply seed to promote vegetative establishment.

Work: Using a small dozer (D-4), road surface will be ripped to minimum depth of 18" as needed. Initial 500 feet of road would be treated to inhibit motorized travel onto route from nearby designated travel routes. Water bars would be constructed as needed. Ripped segments would be broadcast-seeded with appropriate certified seed mix for vegetation type. Road closure signs would be posted at the junction with designated travel routes. Where possible, gates would be removed in the range fence by stringing wire across the opening to inhibit motorized travel onto the rehabilitated route. If this is done, bypass gates would be constructed, as needed, to allow foot and horseback access only through the fence.

4. Construct Travel Barriers at locations shown along closed road segments, particularly in Big Alkali/Winter Ridge area, Castle Peak/Milk Creek, and along Big McCloskey Trail; construct Trailheads at locations shown.

Barrier Objective: Provide physical barriers to inhibit travel by motorized vehicles; prepare seedbed and apply seed to promote vegetative establishment.

Barrier Work: Using a small dozer (D-4), tank traps will be constructed by developing an impassable trench and elevated berm. Where possible, rock barriers would be used instead of developing tank traps in certain locations, such as Winter Ridge. Road closure signs would be posted at the junction with designated travel routes.

Trailhead Objective: Provide safe, adequate vehicle turnarounds and minimal parking at end of motorized routes to serve as trailheads for non-motorized travel beyond. After blading is completed, disturbed areas will be seeded with certified seed to promote desirable vegetative cover.

Trailhead Work:: This work will be completed using BLM dozer contract for 1997 (see Map 24).

5. Install 11 gates at locations shown to enforce seasonal closures.

Objective: Provide physical barrier to inhibit travel by motorized vehicles during seasonal closure periods (10/1 to 4/30 or 12/1 through 4/30)

Work: Install appropriate gate type at locations shown on Map 24. Prioritize work schedule so 3 closure gates for 10/1 thru 4/30 (fall-winter) closure period are installed before 9/20/97. Remaining gates would be installed prior to 11/20/97 for enforcement of winter closure beginning 12/1/97. Certain gate sites will require gates mounted to cement-filled steel casing of a minimum 6" diameter buried to 36" depth such as Winter Ridge site.

6. Field review all single-track motorized routes. Sign routes "closed to motorized travel" and direct users to Special Recreation Management Areas.

Objective: Estimate extent of resource damage from trails and schedule any necessary rehabilitation measures. Due to number of tasks to complete during 1997, actual work, if any, could be delayed until 1998. Consider working with user groups for volunteer/cooperative agreements for assistance with rehabilitation measures in 3 areas / 4.5 miles.

7. Physically close and rehabilitate roads (6 areas/9.4 miles) along powerline corridors.

Objective: Scarify the existing road surface to create an adequate seed bed, apply seed to promote vegetative establishment and inhibit vehicle travel along the route.

Work: Similar task as described for other road closure/rehab projects. Right-of-way holder for the powerline will be asked to complete the closures and required reclamation work.

Projects Related to Transportation System Improvements

8. Install 36" diameter culvert along Bor Flat Road at Big Alkali Creek crossing.

Objective: Mitigate impacts to riparian vegetation in Big Alkali Creek by installing culvert; improving access with culvert installation.

9. Install 18" diameter culvert along Windy Point Road near its terminus to cross drain water drainage from a spring.

Objective: Provide cross-drain for spring under roadway; construct feeder ditches along roadside to drain seeping water into culvert; improve overall travel along road.

10. For 1997, maintain 13 miles of road with a contract dozer and 15 miles of road with BLM grader to improve water drainage and travel surface on the Coberly Gap/Alkali Creek Road, Bor Flats Road and Pisgah Mountain/Windy Point Road.

Objective: Improve travel surface of roads based on current maintenance schedule; provide appropriate water drainage along roads to minimize soil and water erosion.

Work: Conduct road maintenance with grader and dozer per annual maintenance schedule outlined in Table 12. Work could be completed via contract or with BLM's equipment and operators depending upon cost-effectiveness, job location, job requirements, and timing.

11. Realign/construct road segments in Bor Flat Road and Domantle Road north of Welsh Reservoir (.8 miles).

Objective: Relocate road alignment to improve travel safety, mitigate impacts to soils, water and riparian resources.

Work: Field review sites and determine possible route options, necessary resource clearances and complete road survey and design. Construct road segments in summer, 1998 or 1999 pending approval of funding request.

12. Cultural resource inventory

Objective: Investigations should focus on providing a variety of data sets. Since the entire SRMA blocks cannot be inventoried at a Class III (thorough and intensive) level, inventory should optimize potential to identify, manage, and protect important cultural properties. To accomplish this goal, a Class II (percentage) level of inventory based on environmental variables and statistical sampling should be conducted. This inventory methodology will provide information in areas with differing site density expectations. The results of these investigations can then be applied to un-inventoried areas for management purposes.

An exception to this inventory methodology will be for any proposed new roads or trails, which will be individually inventoried at the Class III level. Road closure and rehabilitation work for existing roads will also require some level of cultural resource inventory.

Cultural properties directly affected by actions in the proposed management plan regulations will be assessed and avoided or mitigated.

Table 12. Summary of Road Maintenance Schedule for the Castle Peak Planning Area

<u>Road Name</u>	<u>Road Number</u>	<u>Maintenance Cycle</u>	<u>Maint Level</u>	<u>1997 Work</u>	<u>Road Class (miles)</u>	<u>Road Length</u>
<u>Gypsum Hills Area</u>						
Dotsero Crater	8460	1: 3 years	3		Collector	7
Blowout Mt	8462	1: 5 years	2	X	Local	4
Westhill	8463	1: 3 years	3	X	Local	5
Gypsum Hills SRMA	Complex	N/A	2		Local	
Cottonwood Ck Loop	8475	1: 3 years	2		Collector	10
Big McCloskey Trail	8476	1: 5 years	2		Local	8
Big Red Hill	8477	1: 5 years	2		Local	4
<u>Hells Pocket Area</u>						
Hells Pocket	8495	1: 5 years	2		Local	2
<u>Castle Peak Area</u>						
Bocco Mountain	8501	1: 5 years	2		Local	1
Horse Mt Powerline	8505	1: 5 years	2		Local	3
Alkali Creek	8510	1: 3 years	2	X	Collector	1
Bocco Mt SRMA	Complex	N/A	2		Local	
Milk Creek	8513	1: 1 year	4	X	Arterial	4
Coberly Gap	8514	1: 3 year	3	X	Collector	5
Upper Alkali Creek	8514	1: 5 years	2	X	Local	2
Domantle	8515	1: 5 years	2		Local	3
<u>Windy Point Area</u>						
Windy Point Access	8520	1: 3 years	3		Collector	4
<u>Pisgah Mountain Area</u>						
Big Alkali Access	8522	1: 2 years	3	X	Collector	6
Bor Flat	8523	1: 2 years	3	X	Local	3
Pisgah Mountain	8530	1: 7 years	2		Local	5
<u>Winter Ridge Area</u>						
Winter Ridge	8540	1: 2 years	3		Collector	4
Black Mountain	8543	1: 7 years	2		Local	1

Reference Appendix 8 for Descriptions of Road Classifications and Maintenance Levels
 Note: "1: 1 year" means maintained one time/year, "1: 3 years" means once in 3 years.

Estimated Annual Road Maintenance: The above-listed roads, if maintained on the approximate cycles and road lengths shown, represent a 10-year average of 26.2 miles/year. Weather, road conditions, changes in visitor use and funding could cause this road maintenance estimate to fluctuate.

Monitoring Plan

The success of management actions to accomplish management goals can only be determined based on monitoring. Monitoring takes many forms, from statistically valid, intensive data collection to more casual collection of information from personal observations or one-on-one contacts with visitors. Based on monitoring, restrictions on travel may be adjusted if anticipated impacts or expected results are not occurring.

1. Interim Wilderness Management patrols will be conducted in both WSA's throughout the year, on a schedule reflecting the amount of use an area receives, the potential for conflicts and the availability of funding. Parts of the WSAs with the greatest public use, or where violations are most likely, will be visited more frequently. At a minimum, the WSAs will be visited every month during the summer and fall, with emphasis to increase monitoring during the big game hunting season, if possible. Indicators to be monitored will be the location, type of activity or uses observed, impacts of the activity or use encountered, occurrence of violation of regulations, and the condition of signing or other visitor management or information devices. Necessary preventive maintenance or corrective actions will be identified during the patrols.
2. BLM personnel will observe compliance with the Castle Peak Travel Management Plan travel designations while completing their normal work assignments in the travel plan area, noting problems and providing visitor information as appropriate.
3. All complaints concerning travel violations will be filed. Depending on the nature of the violation, the severity of resource damage, and the likelihood of successful prosecution, some complaints will be investigated. In some cases, citations will be issued. Other complaints will result in remedial actions on the ground, such as updating information boards or brochures, repairing signs or installing new route markers. Corrective actions will be implemented, depending on workload and budget. BLM will try to respond, either verbally or in writing, to all written complaints within 14 days.
4. The location of wintering animals will be monitored through on-going periodic field observations by BLM personnel, consultation with CDOW and informal discussions with landowners to determine the effect of the travel restrictions on wintering animals, especially deer and elk. The purpose of the monitoring is determine the distribution and numbers of these game animals and to see if the time of use is longer after travel restrictions are imposed.
5. Post hunt data, relative to the number of mature bulls and bucks harvested will be reviewed to see if the travel plan is improving the hunting. Additionally, BLM personnel will periodically visit with hunters in the field during visitor patrols to assess their satisfaction with the quality of their hunting experience.
6. Roads that are closed will be checked annually for three years to determine if they have successfully reseeded.
7. Depending on the availability of funding, low level aerial photography could be taken of

the SRMAs every 5 to 10 years and checked to ensure that only the designated routes are being used in the SRMAs. If new motorized routes are found that have not been authorized, BLM personnel will decide whether the new route should remain open or be rehabilitated and whether or not an existing routes will be removed from the plan.

8. The Travel Plan is designed to minimize potential impacts of motorized travel on sage grouse and sage grouse habitat, though other factors seem to be more critical to the viability of sage grouse. If sage grouse are observed, or if conflicts are identified, within the SRMAs, BLM will work with the CDOW to determine if any adjustments to the season of use or location of certain roads or trails are necessary. A more specific monitoring plan for sage grouse would be developed at that time.

9. Known cultural sites within the SRMAs will be periodically reviewed through field inspections to determine if there is a change in the condition of the site(s). Any changes to site condition will be recorded on the appropriate forms from the Colorado Office of Archaeology and Historic Preservation. These forms are kept on file at the BLM and are submitted to the State Historic Preservation Office.

10. Known populations of Penstemon harringtonii within the SRMAs will be periodically reviewed to determine if there is a change in the status of the population.

11. BLM will periodically patrol the area during the summer and fall to informally gather information on visitor needs. Periodically, BLM will conduct surveys to identify visitor use and activity patterns, satisfaction levels, problems encountered and management suggestions.

12. The SRMAs will be patrolled throughout the year to ensure compliance with use restrictions, inspect resource and facility conditions and identify management needs. All designated trails will be inspected annually at the beginning and at the end of the active use season. Access points will be visited periodically during the active use season, scheduled on days and/or times of day when users are likely to be encountered. Indicators to be monitored will be the time, location, type and amount of activity or use observed, impacts of the activity or use encountered, occurrence of violations, the condition of routes, signs and other facilities. Any unauthorized trails will be mapped and described. Necessary preventive maintenance or corrective actions will be identified during the patrols.

Sign Plan

Signing Objectives:

Signing in the Castle Peak Travel Management Area will be done to provide visitors with travel management information and regulations for the area. All motorized travel on public lands within the Castle Peak area will be limited to designated routes only, as shown on the travel management plan map, and through signing with route identification markers. Motorized, non-motorized, and mechanized travel with wheeled vehicles off designated routes is not permitted unless otherwise authorized. Spur roads to campsites and trails off those designated routes will be open unless signed closed. All seasonal and permanent closures will be signed and also identified on the travel map. All routes on the travel map

within the Special Recreation Management Areas (SRMAs) will be designated as "open", unless signed as "closed". Routes in the SRMA's will not be marked with route markers in the initial stages of implementation. Parking along designated routes will be permitted within 100 feet of the route, unless specifically prohibited or obvious resource damage would occur. Snowmobile travel will be allowed throughout the planning area except within the Wilderness Study Areas (WSAs) and areas with seasonal closures.

Signing will be done to provide improved visitor information. Signs will specifically identify public land boundaries, designated routes, camping opportunities, permanent and seasonal road closures, WSA boundaries, destination sites, points of interest, and special use areas. The signing of the area will be done to support the travel management plan, multiple-use activities, and for the protection of the resource and the visitors. Signing will also be done to promote the safety and convenience of public land visitors and users and to inform and interpret for the visitor the natural, manmade, and management features of the public lands. BLM's Public Land Watch sign program will be implemented for the area to assist with travel enforcement.

Castle Peak Sign Plan

Existing Signs. Currently information boards are located at 4 major entrance points in the Castle Peak Area. Boundary signs are in place throughout the planning area. Wilderness Study Area boundaries are signed at major trail junctions throughout the area. Entering and leaving public lands signs are located at most boundary lines with access routes. Exact locations and numbers of signs presently do not exist, and are in a constant state of flux due to weather conditions, vandalism, etc.

Proposed Signs. The following sign descriptions are for the implementation of the travel management plan only. These signs may change slightly due to unforeseen implications of the plan, changes in resource conditions, and/or in visitor use trends. These signs are presented in order of priority for installation to accomplish the implementation of the plan. Funding will determine the exact schedule of completion, but the first three sign categories listed below are scheduled for partial completion in 1997. Signs other than those listed below may be done within the planning area to meet other resource management objectives.

Travel Management "Entrance" Signs. The Castle Peak Travel Management Area will use entrance signs that state "Motorized and Mechanized Travel is Limited to Designated Routes, No Cross Country Travel" (55" x 19" wood or metal). Entrance signs will be posted at access points into the planning area, and at boundaries where limited use areas intersect with U.S., State, and county roads. Twelve placement sites have been identified for installation. Nine of which will receive priority and be installed in 1997.

Informational Bulletin Boards. Informational bulletin boards will be co-located with the travel management entrance signs. They will provide the visitor with a detailed map of the Castle Peak Travel Management Area to include designated routes, travel regulations, Special Recreation Management Areas, Wilderness Study Areas, public land boundaries, and seasonal and permanent route closures. These boards may also be used to inform visitors about safety notices, emergency closures, camping and hunting information and interpretive messages as room allows. Twelve sites have been identified and 9 will receive

top priority for scheduled installation in 1997.

Route Markers. Route Markers will identify designated travel routes throughout the Castle Peak Travel Management Area with exception to the SRMA's as described above.

Motorized and Non-motorized travel is authorized on routes that are signed with a route marker, and displayed on the Castle Peak Travel Management map. Designated routes will be identified with a BLM route number on a post. Short spur routes and trails leading to parking/camping sites will not be signed with route markers and will be open unless otherwise prohibited. Non-motorized travel will be allowed on all designated routes unless otherwise posted to reduce conflicts between users.

Trail Markers. Trail markers will be posted along non-motorized and non-mechanized routes identified in the travel management plan. Each trail will be signed and given a number to coincide with the transportation plan and area map. Travel management signs with allowed uses will be placed at trailheads and entrances at major intersections with U.S., State, and county roads.

Boundary Signs. Boundary signing will be done at boundaries with private lands and other areas closed to public use. "Entering and Leaving Public Lands" 12" x 17" plastic or metal signs will be placed on boundaries where appropriate.

Wilderness Study Area Signs. Wilderness Study Area boundaries will be posted with "Wilderness Study Area Boundary" signs particularly along designated routes, trailheads, and trails. Travel Management signs to inform visitors of allowed uses within the WSA's will also be placed at access points into the WSA's. Other locations of WSA boundary signs will be determined as needed.

Seasonal Closure Points. Seasonal Closure points will be posted with travel management signs listing closure dates, purposes for closure, and activities allowed behind the closures with representative Standard Recreation symbols.

Closed Motorized or Mechanized Routes. All closed motorized or mechanized routes will be signed with travel management signs, indicating allowed uses behind the sign and purposes of the closure.

Who will do the signing?

Signing responsibilities will be with the Bureau of Land Management staff. State, county, and CDOW employees; volunteers; and private land owners may also be part of the signing effort within the Castle Peak Travel Management Area. Local user groups and organizations may be involved in implementing and signing Special Management Recreation Areas. All signing will be coordinated through the Glenwood Springs Resource Area office. Most of the signs will be purchased through federal government sign shops and local suppliers.

Enforcement

Travel designations will be established upon approval of the final travel management plan.

Travel restrictions will be implemented through a closure and restriction notice issued under 43 CFR 8340 and 43 CFR 8364. A draft Travel Notice for the Castle Peak planning area can be reviewed in Appendix 8. The notice will identify the public lands, roads, or trails that are closed or restricted, specify the uses that are restricted, period of time during which the restriction will apply, and the persons who are exempt from the restrictions. The notice will include a statement on the reason for the closure or restrictions. Violations of the closures or use restrictions will be subject to criminal penalties including fines and/or imprisonment. Visitor service patrols and visitor education information will be employed to promote compliance with travel designations and restrictions. Rangers will enforce the regulations.

To promote compliance and effective enforcement, the travel notice will be posted at places near and/or within the area or site where the closure or restriction applies to reasonably ensure visitors are aware of the restricted uses. In addition to the notice, maps showing the areas closed or otherwise restricted will also be posted, and made available to users. The maps will show the system of vehicle travel routes as well as seasonal or other use restrictions. Designated motorized travel routes will be identified or marked at entry points. The end of motorized travel routes will also be identified or marked if the route is a spur or dead end. Regulatory signs will be posted at the beginning of non-motorized travel routes or trailheads, and information on allowable uses may also be posted.

Enforcement action will be taken as needed for follow-up on public complaints, or as violations are encountered in the field. Visitor service patrols will be conducted in the area throughout the year, and information on violations will be referred to law enforcement. Ranger patrols will be conducted periodically to maintain a presence in the field. Both visitor service and enforcement patrols will be scheduled to reflect visitor use patterns, both in terms of the places where public use is expected and during times when visitors are likely to be encountered.

Chapter 7

Public Involvement

Public involvement in the preparation of the Castle Peak Travel has been an important element of the planning process. In early 1996, a list of potential participants in the planning process was developed from various sources and collated into a mailing list. The mailing list included visitors who previously contacted BLM regarding the Castle Peak Area, adjacent landowners, hunters who hunted Game Management Unit 35, BLM grazing permittees, commercial hunting outfitters, commercial jeep tour permittees, people with registered ATVs and motorcycles, organizations interested in travel issues (both motorized and non-motorized travel), organizations interested in environmental issues, and local, State and Federal agencies. A list of over 900 participants was prepared for the initial public mailing which was distributed in March, 1996 and described the need for potential revisions to the current travel management plan for the Castle Peak Area. The current mailing list still contains over 500 individuals, agencies, or organizations.

Specific information obtained from various public outreach efforts is summarized below and is available for review at the Glenwood Springs Resource Area Office. All public responses collected throughout the process are available for public review at the BLM office.

Highlights of Public Comments on the Proposed Action (Alternative 4)

These comments represent common public responses to the Proposed Action (Alternative 4) received during a 60-day comment period during fall, 1996. Responses were generally considered "common" if 10% or more of the respondents supported the statement.

1. Protect wildlife and critical habitats. There is support for designing a system for motorized and non-motorized travel, including seasonal travel closures, that protects sensitive wildlife species and their critical habitats. An alternative that minimizes motorized use on routes in critical habitat areas, on erosive soils, or in scenic viewsheds, or that employs seasonal travel restrictions to accomplish plan objectives, would be rated with a high degree of compatibility with this comment.
2. Protect wilderness values. Commentors are very supportive of prohibiting motorized or mechanized travel, including bicycles and snowmobiles, in the Bull Gulch and Castle Peak WSAs and immediate vicinity. An alternative must close the WSA to motorized vehicle use, including snowmobiles and mountain bicycles, to be rated with a high degree of compatibility with this comment.
3. Keep existing roads open. Commentors want to continue to ride ATVs, jeeps, and motorcycles in the area for access and riding pleasure. The fewer the restrictions placed on motorized travel opportunities, the more compatible the alternative would be with this comment.
4. Maintain existing OHV Use Areas at Bocco Mountain and Gypsum. Users of these areas would not support significant restrictions on OHV use there. Any alternative that maximizes the area available for intensive OHV use would be rated with a high degree of compatibility with this comment.

5. Enforce travel restrictions. Many people are concerned with BLM's ability to enforce travel rules and suggest that closures be planned carefully to make them enforceable and effective.

Chronology of Public Outreach Efforts

March 29, 1996. A news release was submitted to affected newspapers and radio stations announcing the initiation of a public process to consider if travel management changes were needed in the Castle Peak planning area. A brochure was also distributed to the 900-person mailing list, showing the travel planning area and providing a map of the current travel management decisions from the 1984 RMP. The mailing also announced a schedule for 3 open house public meetings in April in the towns of Gypsum, Eagle and McCoy. A questionnaire was also mailed at that time seeking visitor use information for the Castle Peak planning area.

April 15, 1996. The first open house meeting was held in Gypsum and attended by 12 people. The purpose of the open houses was to discuss travel management issues and assess the need for changes to the current travel plan.

April 17, 1996. The second open house was sponsored in Eagle at Exhibition Hall, Eagle County Fairgrounds, and attended by 30 people.

April 18, 1996. A third open house was held in the McCoy School, and attended by 20 people.

Concerns brought up by the public at the open house meetings:

- * Equal and fair access to BLM lands for everyone.
- * Need to improve hunting opportunities and wildlife habitat in the area.
- * Provide for quality rather than quantity hunts.
- * Game movement to inaccessible places such as private property.
- * Too much road hunting, and the impacts of OHVs on wildlife.
- * Too many parallel roads and dead end spurs.
- * Opportunities for open areas (OHV and motorcycle).
- * The need for better informational and boundary signing.
- * Access to WSA's need to be maintained while still providing for opportunities for solitude.
- * Concerns regarding conflicting uses within the WSA.

April 29, 1996. The GSRA Area Manager sent a "letter to the editor" of local papers, thanking participants of the open houses and urging continued involvement in the planning process.

June 14, 1996. Letters were sent to over 500 people confirming the need for travel plan revisions and suggesting the plan's mission, goals and objectives. The letter included a summary of the Visitor Use Questionnaire and summary of comments and concerns received at open house meetings.

Of the 939 questionnaires sent out, 274 (29%) responses were returned, 88% within the state and 12% out of state. Of the in-state visitors 27% were local users residing within 20

miles of the area and 61% were from outside the county. The mailing list consisted of big game hunters who had hunted in the area, ATV and OHV registrants from adjoining communities, local, state, and federal governments, adjacent private landowners, snowmobilers, bicyclists, fishing, boating and grazing permittees, and general recreationists.

The questionnaire showed that most visitors (68%) travel with friends and acquaintances to the Castle Peak area, second with family, then as individuals, followed by clubs and organizations, and lastly with commercial outfitters or guides.

Factors identified as being important to visitors:

- * 91% Enjoying the scenery
- * 86% Getting away from the demands of day to day life.
- * 85% Being with friends and family.
- * 80% Feeling part of the natural environment.
- * 78% Releasing tension and anxiety.

Problems that visitors have encountered:

- * 59% Access to BLM land blocked by private property
- * 40% Finding trophy deer or elk on BLM land
- * 39% Not enough motor vehicle access to certain areas
- * 34% Too many areas closed to motor vehicles

52% of those responding found using motorized vehicles and equipment important or very important to their experience in the planning area. 33% of the visitors responding found using ATVs important, while 40% found getting away from motorized vehicles was important.

July 26, 1996. Another letter and 5 maps depicting Alternatives 1, 2, and 3 and showing important resource values were distributed. Also provided were summary narratives of Alternatives 1, 2 and 3. Written comments were requested by 8/30/96.

Approximately 64 letters were received, with 15 reviewers supporting Alternative 1 (Current Management), 5 supporting Alternative 2, 41 supporting Alternative 3, and 3 expressing no preference. Comments varied a great deal, but the general concerns focused around the specific alternatives relating to motorized travel limitations, access issues, wilderness values, implementation and enforcement concerns, surrounding growth and development problems, wildlife benefits, erosion problems, and OHV areas. Suggestions for specific road closures and maintained access points were also received.

September 9, 1996. A fourth mailing included a brochure featuring a map and description of the Proposed Travel Management Plan (Alternative 4). Comments were requested by 12/1/96. The BLM also solicited public interest in partnerships, user fees, and ideas for participation in a Public Land Watch program. The mailing included an update on the plan's progress and a schedule for completion.

Approximately 70 responses were received. Comments focused on a desire to protect wildlife and critical habitats, protect wilderness values, improve the big game hunting

experience, and provide for motorized recreation use. Questions were also submitted, asking how BLM would enforce the travel restrictions and seeking clarification on the proposed winter closures and summer routes. Comments specific to geographic areas noted a variety of opinions on how travel should be managed.

February 2, 1997. Over 500 letters were sent with a summary of the issues raised during the comment period ending 12/1/96. An updated plan schedule was also distributed along with a statement of BLM's intent to provide a final Travel Management Plan for public review during April, 1997.

May, 1997. The sixth mailing included a letter and map/brochure depicting the Final Castle Peak Travel Management Plan (Alternative 5). The brochure discussed changes from the Proposed Plan (Alternative 4) and the Final Travel Management Plan and a short rationale for the changes. The mailing also included an introductory letter informing the public they may obtain a copy of the plan on request. Written comments on the plan will be accepted for 30 days. The BLM will issue a Notice of Availability in appropriate newspapers and begin the Governor's Consistency review (60- day period).

A seventh mailing is planned for July, 1997, (after written comments are received and reviewed) to announce the final decision and to initiate the protest and appeal process.

Implementation of the plan is expected to begin in late summer, 1997.

Appendix 1

Summary of Roads and Trails by Geographic Area (Existing Transportation System)

Milk Creek Basin

Eagle County Roads 4 and 54 provide vehicle access into lower and upper Milk Creek basin. Eagle County Road 4 is graveled and maintained by the County to provide year round access to landowners and public land users. Off-highway use along this route has increased steadily since the early 1980's. Motorcycle tracks and ATV/jeep use (particularly during hunting season) have resulted in a new system of roads and trails. Monitoring has shown this type of use is increasing in the area.

County Road 54 is a natural surfaced road traversing clayey soils that render the road impassable when wet, resulting in unsafe driving conditions along the steep slopes of Horse Mountain. From the cattleguard west, the Milk Creek road is BLM responsibility. This route was reconstructed and improved in the mid-1960's after the Castle Peak parcel was transferred to the BLM from the US Forest Service. The BLM road is maintained annually. Recent improvements along this route include the installation of a one-lane bridge, cattleguard replacement and numerous culvert installations.

The Milk Creek Road system splits as it nears the Castle Peak WSA boundary with the south fork continuing on to Blue Lake and the north fork providing access to Coberly Gap and Domantle areas. In 1990 the culvert at the Milk Creek crossing northeast of Reap Spring was replaced with a larger pipe and additional rock aprons. This work improved the motorized accessibility to Blue Lake. Segments of the Coberly Gap Road were realigned and improved during the summer of 1992 to mitigate vehicle damage to riparian areas.

Castle Peak Wilderness Study Area

Three distinct routes provide motorized access for the public to Castle Peak WSA: Milk Creek Road, Winter Ridge Road and Pisgah Mountain Access Road. These access routes are discussed individually in this narrative.

An Off-Highway Vehicle limitation has been in place that covers the entire Castle Peak WSA and also includes a vast area surrounding Domantle Peak northeast of the WSA. The OHV limitation restricts motorized travel to designated roads and trails, except for snowmobiles. This OHV limitation has been largely effective, but there are some inherent travel management problems which attract use resulting in violations. Motorized vehicle use on certain routes are only accessible to neighboring private land owners; hunters see this as unfair since these routes are not physically accessible to the public because of the land ownership pattern. This has resulted in violations by hunters seeking access to areas across routes that are not designated for motorized travel.

Within the Castle Peak OHV limitation area, there are three roads within the boundary of the WSA that, by designation, are open to vehicle use. This situation creates conflicts with motorized travelers and wilderness visitors. Such conflicts revolve around expectations for solitude within the WSA; these conflicts particularly escalate during the hunting seasons. Furthermore, unauthorized motorized use within the WSA occurs, primarily during hunting seasons, from users who choose to travel off-road from these routes. Other roads from

Coberly Gap, Domantle and the Big Alkali Creek Basin (Bor Flat) are designated routes for motorized travel to and/or along the WSA boundary. Unauthorized off-highway travel does occur on these routes which detracts from the wilderness qualities.

Motorized access to the top of Castle Peak is possible from the south over the Eby Creek Road although this road is in private ownership. Occasional administrative use occurs on this road by Castle Peak communication site users. Motorized travel is not authorized within the WSA boundary. Reports of unauthorized motor vehicle use from the private lands west and south of Castle Peak have been received; such use generally is reported during hunting seasons.

Welsh Reservoir/Domantle Area

The Coberly Gap Road traverses the east side of Castle Peak WSA to Welsh Reservoir. This route is maintained annually. Motorized travel north from Welsh Reservoir on designated routes is allowed. This route is steep and difficult to maneuver particularly during wet conditions. The route is part of the road system used throughout the summer and fall months by jeep tour outfitters permitted by the BLM. Further north, travelers can access the Domantle area along this route. Because of a parcel of private land, motorized travel is not possible from Domantle north into the Big Alkali Creek Basin.

Highway 131/Windy Point Area

In 1995 the junction of BLM's Windy Point Road with Highway 131 was realigned and improved to provide safe ingress and egress to public lands. This road system has been typically maintained with a dozer once every 4 to 5 years. All roads in the Windy Point system are included in the OHV limitation area that restricts motorized travel to existing roads and trails, except for snowmobiles.

Pisgah Mountain Area

Eagle County Roads 41 and 41B provide direct access to public lands in the Pisgah Mountain area. In 1987 the BLM completed a land exchange which provided public land visitors a new motorized access route to Pisgah Mountain and Big Alkali Basin (Bor Flat). Prior to the land exchange, motorized access to Pisgah Mountain was not possible unless permission was obtained to use private roads. This new access point opened many acres of public lands to motorized travel. Aside from roads designated "open" for OHV use within the Big Alkali Creek basin, motorized travel in the remaining Pisgah Mountain area is limited to existing roads and trails. Enforcement of this travel restriction is difficult; with the increased use of ATV's, the development of unauthorized trails is growing.

BLM's Pisgah Mountain Access Road is natural-surfaced; the clayey soils render the road impassable when wet. Road maintenance with a dozer to repair the damaged road surface and to improve road drainage with water bars was conducted in 1990, 1994 and 1996. Motorized travel in the Pisgah Mountain area, particularly during hunting seasons, has grown annually. The clayey soils combined with wet weather conditions during hunting season have resulted in the "braiding" of parallel routes by road users avoiding deep impassable ruts. Additionally, nearby landowners have experienced trespass problems and have been asked to "rescue" vehicles that become inoperable during these periods of impassable road conditions.

The Pisgah Mountain Access Road also provides indirect access to the north side of Castle Peak. Until a recent sale of a ranch and the resulting closure of a popular road segment ¼ mile in length, public motorized access was available to BLM's road and trail system on North Castle Peak. Unauthorized pioneering of a road around the private land has occurred on BLM particularly by hunters who have historically gained access to North Castle Peak and the Domantle areas.

Some roads (designated open to motorized vehicles) are not available for public use as they originate on private ground. With the loss of motorized travel (by the private land closure of the ¼ segment described above), no viable motorized travel options are available to the public. During hunting seasons, this creates an advantage for the nearby landowners who are able to use "designated" BLM routes that begin on private land, yet the general public cannot use these routes.

Winter Ridge Area

South of Catamount Bridge BLM's Winter Ridge Road provides public access to the Winter Ridge trailhead on the northwest side of Castle Peak WSA. Winter Ridge Road is maintained on a 2-3 year cycle. The Winter Ridge Trail, closed to motorized use, is a popular route for foot and horse access to the WSA. Two roads west of Winter Ridge Road provide vehicle access to public lands near Black Mountain. These non-maintained roads are primarily used during hunting season.

Black Mountain Area

A road system exists on the north slopes of Black Mountain north of Bull Gulch WSA boundary. This system is not accessible by the travelling public since the road begins on private lands to the north. The area is within an "open" OHV designation and new roads and trails are being pioneered by hunters with ATVs to gain access into the Black Mountain area.

Bull Gulch WSA Area

The Bull Gulch WSA has two OHV designations with most of the northern half being "closed" to motorized travel year-round and the southern half being "open" to motorized travel. The rough topography of Bull Gulch and Posey Creek combined with the "closed" designation, assure adequate protection of the wilderness character. The southern half of the WSA (managed as "open" for motor travel on and off roads) is beginning to show vehicle use impacts that degrade wilderness qualities. The southern boundary of the WSA is delineated by the Big McCloskey Trail with public access available from Colorado River Road (County Road 301). The Big McCloskey Trail is typically maintained every 5 years. Another access point to the southeast part of the WSA is provided over the Big Red Hill (County Road) and Greenhorn Mountain Roads.

Dotsero Crater Area

The Mayne Block Plant mining area east of Dotsero Crater is accessed by a regularly maintained cinder-surfaced road that traverses north of the Dotsero trailer park to the crater. Although the road crosses private lands, the route is generally open to public travel.

Dry Lake/Gypsum Hills Area

The primary access to the Dry Lake road system is via Eagle County Road 51 (Road

Gulch) north of Gypsum. In the past 10 years the first mile of this road was upgraded for the truck haul route carrying gypsum ore from the Eagle/Gypsum mine to the wallboard plant in Gypsum. The upgrade has significantly improved traffic safety concerns arising from conflicts with road users and the mine trucking traffic. The remaining segment of County Road 51 to Dry Lake is typically a 1 lane, natural surface road traversing the steep sidehills of Road Gulch.

The Trail Gulch Road (County #51) from the Agnew Gulch junction north to the Colorado River Road is classified as "Non-maintained" by the county. The road is marginally passable during dry weather conditions depending on the ability to traverse over or around debris flows that occasionally occur in Trail Gulch. This segment essentially follows the sideslopes or channel bottom of Trail Gulch.

The existing County and BLM road system served by County Roads #50 and #51A in the Dry Lake Area provides various opportunities for access to public lands. The BLM road system west of Dry Lake to Blowout Mountain and Dotsero Crater is maintained every 2-3 years. The road east of Dry Lake into Cottonwood Creek is also maintained on a 2-3 year cycle. Many side roads and trails exist on public lands as depicted on the Transportation Map. Over the years these secondary roads and trails were developed by hunters, woodcutters, and ranchers. Many roads were pioneered to access BLM projects such as fences, fuelwood sales, pipelines and water storage facilities. These secondary routes are generally not maintained.

Eagle County maintains the roads in the area one time annually, as a minimum, except for Trail Gulch (#51) and Big Red Hill (#50) Roads which are non-maintained. In addition, the road system accesses private lands near Dry Lake and private parcels east in West Cottonwood Creek and north to Big Red Hill.

Hells Pocket/Red Canyon Area

The north slopes of Red Canyon along the I-70 corridor are open to motorized travel via a road system that was constructed in 1981-82 during the installation of overhead powerlines. The public access point for this area is at the junction of County Road near the I-70 overpass. These roads have not been maintained since their construction.

Eby Creek Access including Castle Creek

Before the Eby Creek Road was vacated by Eagle County Commissioner decree in the late 1970's, public travel was possible north from Eagle over the western side of Castle Peak to Burns and Catamount Bridge. With the County Road vacation of the northern portion of the Eby Creek public road, motorized access in the Eby Creek drainage is strictly limited to the county road itself. Hiking opportunities to public lands are possible from the Eby Creek Road (#33) which ends about 3 miles north of Eagle.

County Road 33A up Castle Creek east of Eby Creek does provide all-weather access to the public lands directly northeast of Eagle. Motorized access within the area was improved in the early 1980's with the construction of the CUEA powerline.

Appendix 2.

BLM Land Health Standards

The Glenwood Springs Resource Management Plan was amended in February, 1997 to adopt these standards for public land health. These standards can be an effective communication tool, providing understanding of expected resource conditions and acceptable management practices. In areas where the standards are not being achieved, current uses and management actions will be reviewed and modified if necessary to assure significant progress toward achieving a healthy ecosystem. The Colorado Public Land Health Standards Decision Record, Finding of No Significant Impact (FONSI) and EA is available for review in the GSRA office.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.

Standard 2: Riparian systems associated with both running and standing water, function properly and have the ability to recover from major disturbances such as fire, severe grazing, or 100 year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.

Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.

Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law and as required by the Clean Water Act.

Appendix 3.

Current and Revised RMP Travel Management Decisions

The Decision Record for the RMP Amendment/EA will contain decisions that amend the RMP and decisions that implement the RMP. This Appendix describes (1) the current RMP decisions (those that apply resource area-wide and those that apply strictly to the Castle Peak Area) and (2) the proposed RMP decisions that amend the RMP. These proposed amendments may be protested to the BLM Director.

The decisions that serve to implement the RMP are described in Chapter 6. Those decisions will be appealable to the Interior Board of Land Appeals, at the time action is taken to implement them.

Current RMP Travel Management Decisions (Resource Area-wide)

These decisions would remain unchanged if Alternative 1 (Continuation of Current Management) is adopted.

Off Highway Vehicle Management

- * Leave 397,946 acres (70%) of public land open to motorized vehicle use.
- * Close 19,620 acres (3.5%) to motorized vehicle use.
- * Limit motorized vehicle use to existing roads and trails, designated roads and trails, and certain seasons of use on 148,476 acres (26.5%).

Transportation Management

- * Acquire legal access into areas of public land where legal access does not exist.
- * Use, improve and maintain existing roads and trails in areas where feasible. Construct new roads and trails where none exist or where existing roads and trails are inadequate to meet visitor needs.

Recreation Management

- * Adopt Recreation Opportunity Spectrum (ROS) Management classes.

Current RMP Travel Management Decisions (Castle Peak Planning Unit)

Off Highway Vehicle Management (Refer to Map 1)

- * Maintain the northern portion of the Bull Gulch WSA as "closed to motorized travel year-round" (9,839 acres) and the southern portion as "open to motorized travel year-round" (5,362 acres).
- * Maintain the Pisgah Mountain area to "limit motorized travel on existing roads and trails year-round except for snowmobiles operating on snow" (15,679 acres).
- * Maintain the Castle Peak area as "motorized travel limited to designated roads and trails year-round except for snowmobiles operating on snow" (20,128 acres)

Transportation Management

The Transportation Management decisions focused on access needs (easements) and the transportation system. The RMP listed a number of Easement Acquisitions in priority order. Five of the six access points identified for the Castle Peak area have been acquired through easement acquisition or land exchange. The uncompleted priority is trail access in Posey Creek within the Bull Gulch WSA.

Recreation Management (Refer to Map 3)

Manage the entire Castle Peak planning area for semi-primitive motorized (SPM) recreation opportunities (86,619 acres), except for: 7,296 acres within the Bull Gulch area (semi-primitive non-motorized - SPNM); 21,087 acres along the Colorado River Road and Eby Creek Road to Burns corridor (roaded natural - RN); and 4,586 acres along I-70 and Hwy 131 (semi-urban - SU).

Proposed RMP Travel Management Decisions (Resource Area-wide)

These decisions represent Alternative 5. If adopted, they will be protestable to the BLM Director for a 30 day period following public notice of the proposed RMP amendment.

Off Highway Vehicle Management

- * 324,010 acres (57%) of the public land will be available for OHV use without travel management limitations.
- * 204,726 acres (36.5%) of the public lands will be available for OHV use with limitations. Limitations may include OHV use only on existing or designated roads or trails, or during certain seasons, depending on the resource values and uses being protected.
- * 37,305 acres (6.5%) of the public land will be closed to OHV use to protect these resource values and to reduce or prevent conflicts with these resource uses."

Recreation Management

- * Adopt Castle Peak Recreation Opportunity Spectrum (ROS) Management classes

Proposed RMP Travel Management Decisions (Castle Peak Planning Unit)

Off Highway Vehicle Management (Refer to Maps 9, 11 and 12)

- * To protect the wilderness values and be consistent with BLM's Interim Wilderness Management Policy, close the entire Bull Gulch and Castle Peak WSAs (27,438 acres) to motorized travel, including snowmobiles, and mechanized uses, including mountain bicycles.
- * To protect erosive soils, wintering wildlife, scenic views, sensitive water quality management areas, cultural resources, and critical habitats, motorized travel is limited to designated roads and trails year-round on 92,144 acres.
- * To provide enhanced motorized recreation opportunities for 4x4 driving, trail riding and hill climbing, Special Recreation Management Areas (SRMA) will be designated in the Bocco Mountain area north of Wolcott (1,396 acres) and in the Gypsum Hills area north of Gypsum (16,930 acres). To protect erosive soils, wintering wildlife, important views, and critical habitats, motorized travel within the SRMAs would be limited to designated routes, although the system of routes is extensive (The 18,326 acres that comprise the 2 SRMAs are included in the 92,144 acres of motorized travel limited to designated roads and trails).
- * To protect critical wildlife habitat (severe winter range, concentration and production

areas), and reduce road damage during wet seasons, travel on about 65 miles of designated routes in the planning area would be restricted during the winter (December 1 through April 30). The winter closure area comprises 53,855 acres. To ensure sufficient public access to meet Colorado Division of Wildlife harvest goals, implementation of the winter closure would be adjusted to coincide with the end of late season big game hunts.

* To protect critical wildlife habitat (severe winter range, concentration and production areas), reduce road damage during wet seasons and reduce hunting pressure on big game to keep deer and elk on public lands longer to improve big game hunting (success and quality), travel on about 7.5 miles of designated routes in the planning area would be restricted during the fall and winter (October 1 through April 30).

Recreation Management (Refer to Map 12)

* To manage the Castle Peak, Bull Gulch and Pisgah Mountain areas for semi-primitive non-motorized (SPNM) recreation opportunities totalling 29,139 acres. Manage the remaining public lands in the Castle Peak Planning area for semi-primitive motorized (SPM) opportunities (61,795 acres), except along the Colorado River Road which would be managed to provide roaded natural (RN) opportunities (24,314 acres) and along I-70 and Hwy 131 which would be managed to provide semi-urban (SU) recreation opportunities (4,309 acres).

Maintenance Change of RMP

This decision does not revise the earlier RMP decision, but clarifies it specific to the Castle Peak Area.

Transportation Management

* Acquire access into areas of public land consistent with the overall resource objectives of the area including consistency with the Castle Peak Travel Management Plan and the recreation opportunity (ROS) objectives.

Appendix 4

Eagle River Watershed Plan (ERWP) Goals and Recommendations

Goals (ERWP, page 9)

1. Determine and provide optimum water quantity and quality to maintain a healthy and naturally self sustaining trout population as in indicator species of a healthy aquatic environment and for a quality fishing experience.
2. Protect or restore open space and sensitive areas such as springs, wetlands, flood plains, riparian zones, critical habitat and other geographic features that are associated with the watershed.

Recommended Actions

Water Quality. Implement appropriate Best Management Practices for recreation (ERWP, page 39).

Wildlife. Implement measures to protect and improve water quantity and quality by managing natural sediment loads (ERWP, page 47). Restrict access into and monitor critical wildlife areas (ERWP, page 49).

Land Use. Protect riparian lands as highest open space priority (ERWP, page 78).

Recreation Management

- * Adopt Castle Peak Recreation Opportunity Spectrum (ROS) Management classes

Proposed RMP Travel Management Decisions (Castle Peak Planning Unit)

Off Highway Vehicle Management (Refer to Maps 9, 11, and 12)

- * To protect the wilderness values and be consistent with BLM's Interim Wilderness Management Policy, close the area Bull Gulch and Camp Peak WAs (27,439 acres) to motorized travel, including snowmobiles, and mechanized user, including mountain bicycles.

- * To protect sensitive soils, riparian wildlife, scenic views, sensitive water quality management areas, cultural resources, and critical habitats, motorized travel is limited to designated roads and trails year-round on 92,144 acres.

- * To provide enhanced motorized recreation opportunities for 4x4 driving, trail riding and hill climbing, Special Recreation Management Areas (SRMAs) will be designated in the Boxer Mountain area north of Wolcott (1,396 acres) and in the Gypsum Hills area north of Gypsum (15,936 acres). To protect sensitive soils, riparian wildlife, scenic views, and critical habitats, motorized travel within the SRMAs would be limited to designated routes, although the system of routes is extensive (The 16,332 acres that comprise the 2 SRMAs are included in the 92,144 acres of motorized travel management to designated roads and trails).

- * To protect critical wildlife habitat (sensitive winter range, forage and production

Appendix 5

BLM Riparian-Wetland Initiative Goals

To protect riparian areas and wetlands, both economically and environmentally valuable, the BLM in 1991 launched a program called the Riparian-Wetland Initiative of the 1990's. This program sets goals and strategies for the agency in its efforts to upgrade the ecological condition of riparian-wetland areas. The principle objective of the initiative is to get at least 75% of these areas into what the BLM calls "proper functioning condition" by 1997. The BLM has been working toward this goal through a variety of land management practices. The four major goals of the initiative are:

1. To restore and maintain riparian-wetland areas so that at least 75% are in proper functioning condition by 1997.
2. To protect riparian-wetland areas and associated uplands through proper land management and by avoiding or mitigating negative impacts. The purpose is to protect, acquire and expand key areas so the BLM can manage them more effectively and efficiently.
3. To carry out a riparian-wetland information and outreach program that includes training and research to raise awareness and understanding of the importance of health riparian-wetland areas.
4. To maintain existing and form new public-private partnerships to supplement and accelerate the BLM's work by drawing on the talents of volunteers and using non-Federal funds.

Appendix 6

Relationship of County Plans to Travel Management

The **Eagle Area Community Plan (EACP)** was adopted by the Planning Commission's of the Town of Eagle and Eagle County in August, 1996. The EACP provides the following information directly pertaining to travel management on public lands in the Castle Peak planning unit.

The Vision (EACP, Executive Summary, page 8)

1. Protect riparian corridors.
2. Protect wildlife habitat and corridors.
3. Preserve open space and provide appropriate access to public lands.

Community Size and Character, Guiding Policy 3 (EACP, Executive Summary, page 15). Identify all major and minor views of natural and man-made physical elements and exemplify character and spirit of the study area.

Riparian Corridors, Wildlife Habitat, and Other Sensitive Natural Area, Guiding Policy 3 (EACP, Executive Summary, page 21). Protect other sensitive natural areas such as ridgelines and steep slopes from incompatible development.

The **Eagle County Master Plan (ECMP)** was effective January 17, 1996. The ECMP provides the following information directly pertaining to travel management on public lands in the Castle Peak planning unit.

Environmental Quality, Guiding Policy 1 (ECMP, page 61). Protect, maintain and enhance critical wildlife habitat areas. Avoidance of critical wildlife habitat areas by development is the County's preferred approach.

Open Space and Recreation, Guiding Policy 4 (ECMP, page 67). Ensure that appropriate forms of public access are provided to public lands and rivers.

Appendix 7

Recreation Management Objectives for Recreation Opportunity Classes (ROS)

Primitive areas: These areas provide opportunities for visitors to experience isolation from the sights and sounds of man, to feel a part of the natural environment and have a high degree of challenge and risk and use outdoor skills. These areas are remote, generally over three miles from a primary road and over half a mile from other motorized routes. Travel is limited to non-motorized means, and is mainly cross country or on unimproved paths.

The setting is characterized by essentially unmodified natural environment. Resource manipulations are few and largely unnoticeable.

Visitor densities are very low, and there is very little evidence of other users. Visitor encounters are infrequent, and generally no more than 1 to 2 other parties per day.

Visitor management restrictions, controls, structures or facilities are not evident or provided within the area, except for those essential for resource protection and safety. Facilities for comfort or convenience of users are not provided.

Semi-Primitive Non-Motorized areas: These areas provide some opportunities to experience isolation from the sights and sounds of man, and have a high degree of interaction with the natural environment, but not as important as in a Primitive area. They also provide opportunities to have a high degree of interaction with the natural environment, take risks and use outdoor skills, but these are not as valuable as in a Primitive area. These areas are somewhat remote, generally over half a mile from any motorized route. Travel is limited to non-motorized means, and improved trails may be provided.

The settings are characterized by a predominantly unmodified natural environment. Resource manipulations may be encountered over most of the area but they are subtle and only a few are noticeable.

Concentration of users is low, and there are few signs of other visitors. Visitor encounters are more frequent than in a primitive area, but generally no more than 5 other parties per day near access points.

Visitor management restrictions, controls, structures or facilities may be provided for resource protection and safety, but they are subtle. Recreation site improvements are very limited and rustic, and made of native materials wherever possible. Facilities for comfort or convenience of users are not provided.

Semi-Primitive Motorized areas:

These areas provide some opportunities for visitors to experience isolation from the sights and sounds of man, but they are not as important as in non-motorized areas. They provide opportunities to have a high degree of interaction with the natural environment and take moderate challenges and risks. They also provide opportunities to use outdoor skills. These areas are generally away from secondary highways, but are readily accessible by

motorized vehicle. Access roads are primitive and generally passable only by high clearance or 4WD vehicle, or OHVs. Typical roads are single lane dirt surfaced and rough. Road maintenance is minimal to keep them passable, and limited to removal of obstructions and provide adequate drainage.

The settings are characterized by a predominantly unmodified natural environment. Resource manipulations may be encountered over most of the area, most of them are subtle but some may be noticeable.

Concentration of users is low, with some signs of other visitors. Visitor encounters are relatively frequent, but generally less than 10 other parties per day along travel routes.

Visitor management restrictions, controls, structures or facilities may be provided for resource protection and safety, or in few instances to enhance recreation opportunities. Recreation site improvements are subtle, limited and rustic, and made of native materials wherever possible.

Roaded Natural/Rural areas: These areas provide about equal opportunities for affiliation with other visitors and to experience isolation from the sights and sounds of man. Opportunities for a high degree of interaction with the natural environment are available, but opportunities to take challenges and risks are not very important except for specific activities.

These settings are characterized by a generally natural environment, and evidence of rural residences and agricultural land uses are found over most of the area. Resource manipulations are noticeable throughout the area and are harmonious with the natural environment, and some substantial modifications may be encountered. These areas are along primary roads and are accessible to standard passenger vehicles. Road maintenance is regular and relatively frequent.

Concentration of users may be high, and evidence of other users is common. Visitor encounters are frequent along travel routes and recreation sites.

Visitor management restrictions, controls, structures or facilities may be provided for resource protection and safety, for user convenience and to enhance recreation opportunities. Recreation site improvements may be developed to accommodate specific recreational uses or special activities.

Semi-Urban/Rural Areas: These areas provide opportunities to participate in specific recreation activities and natural setting not as important. Opportunities for experiencing challenge, risk taking and use of outdoor skills is also unimportant, except for special activities may be available which involve challenge and risk, and that may require special skill to participate in. These areas are along primary roads and are accessible to standard passenger vehicles. Road maintenance is regular and frequent.

These settings are characterized by a substantially modified natural environment. Landscape modifications and a variety of land uses are obvious. Resource manipulations are substantial and widespread.

Concentration of users may be high, and evidence of other users may be everywhere.

Visitor encounters are frequent throughout most of the area. Visitor management restrictions, controls, structures or facilities may be provided for resource protection and safety, for user convenience and to enhance recreation opportunities. Recreation site improvements may be developed to accommodate high use volume for specific recreational uses or activities.

Appendix 8

Draft Travel Notice for Castle Peak Travel Management Plan

DEPARTMENT OF INTERIOR

BUREAU OF LAND MANAGEMENT

CO-070-

CASTLE PEAK AREA TRAVEL MANAGEMENT DESIGNATIONS AND USE RESTRICTIONS

AGENCY: Bureau of Land Management, Department of the Interior

ACTION: Notice of change in off highway vehicle use designations, and area closure and restrictions

SUMMARY: Notice is hereby given on changes in the off highway vehicle use designations and travel related rules of conduct on approximately 119,582 acres of public land administered by the Grand Junction District, Glenwood Springs Resource Area of the Bureau of Land Management. This order closes certain public lands described below to use of all motorized and mechanized vehicles, limits use of said vehicles to designated routes, and prohibits use of said vehicles during certain seasons. The motorized and mechanized travel designations and use restrictions are established pursuant 43 CFR 8341.2(a), and 43 CFR 8464.1. These designations and use restrictions modify current designations established in the Glenwood Springs Resource Area Resource Management Plan, record of decision signed in January 1984, and supersede general rules of conduct for recreational use of public lands.

The affected public land is generally located in Townships 2, 3, 4, and 5 South, Ranges 83, 84, 85 and 86 West, 6th Principal Meridian, Eagle County.

EFFECTIVE DATES: The designations will be effective as of the date of approval of the Castle Peak Travel Management Plan. The use restrictions shall be effective immediately upon approval of the Plan until rescinded or modified by the Authorized Officer.

SUPPLEMENTARY INFORMATION:

Public lands in the Castle Peak area contain important and fragile resource values and provide a variety of outdoor recreational opportunities. Changes in the current travel designations are needed to protect erosive soils, wintering wildlife habitat, sensitive water quality management areas, cultural resources, important scenic values, semi-primitive non-motorized settings, and wilderness values. Growing recreational use in area is expected to continue, and travel management is needed to prevent conflicts between users and unacceptable impacts on resource values, while continuing to provide a variety of recreation opportunities.

These travel designations and use restrictions are the result of the Castle Peak Travel Management Plan. Public comments were received throughout the planning process beginning in April, 1996, including scoping of the issues and potential solutions, public review of travel management alternatives and a travel management plan proposed in September, 1996. Comments of the Colorado Division of Wildlife and other State and local agencies, adjacent landowners, interest groups and users.

The areas, roads and trails affected by this order will be posted with appropriate regulatory signs. Information including maps of the restricted areas is available in the Resource Area Office and District Office at the addresses shown below.

The Castle Peak Area described herein will be subject to the following designations, closures and use restrictions:

A. Closed Designation: All motorized and mechanized vehicle use shall be prohibited year round including snowmobiles operating on snow in the following areas:

- 1) Bull Gulch Wilderness Study Area- 15,201 acres
- 2) Castle Peak Wilderness Study Area- 12,237 acres

B. Limited Designation: All travel by motorized and mechanized vehicles is limited to designated routes year-round on all public lands not otherwise closed. Cross-country motorized and mechanized travel is prohibited, except snowmobiles.

C. Fall Limitation: Between October 1 and April 30 annually, all motorized vehicle use is prohibited on the following routes, including snowmobiles.

1. Stagecoach Trail- Approximately 5.1 miles of road generally in T2S, R84W Secs. 10, 11, 12, 13 and 24, southwest of McCoy.
2. Horse Mountain powerline road- 2.3 miles located generally in T3S, R83W Secs. 28, 32, and 33, northwest of Wolcott.

This fall limitation does not restrict non-motorized travel.

D. Winter Limitation: Between December 1 and April 30 annually, all motorized vehicle use is prohibited on and off the roads and trails, including snowmobiles, on public lands in the following areas:

1. Cottonwood Creek- 11,768 acres west of Eby Creek northeast of the Town of Eagle.
2. Red Canyon- 5,451 acres east of Eby Creek and west of Milk Creek northeast of the Town of Eagle.
3. Bocco Mountain- 3,117 acres east of Milk Creek and north to the Alkali Creek and Horse Mountain powerline road northeast of Wolcott.
4. Domantle-Bohr Flats- 10,134 acres north of Alkali Creek, south of Pisgah Mountain and east of the Winter Ridge Road southeast of Burns.
5. Pisgah Mountain-Windy Point Area- 15,849 acres along the Colorado River south of McCoy.
6. Black Mountain- 7,536 acres west of the Winter Ridge Road and along the Colorado River road near Burns.

This winter limitation does not restrict non-motorized travel, or any travel on county roads.

Persons who are exempt from these restrictions include any Federal, State, or local officers engaged in fire, emergency and law enforcement activities; BLM employees engaged in official duties, and other persons specifically authorized to conduct or engage in the otherwise prohibited use or activity. The use restrictions do not apply to use of county roads or private lands.

PENALTIES: Violations of this closure and restriction order are punishable by fines not to exceed \$1,000 and/or imprisonment not to exceed 12 months.

FOR FURTHER INFORMATION CONTACT: Michael S. Mottice, Area Manager, Glenwood Springs Resource Area, 50629 Highway 6/24, P.O. Box 1009, Glenwood Springs, CO 81602; (970) 947-2800. Mark Morse, District Manager, Grand Junction District, 2815 H Road, Grand Junction, Colorado 81506; (970) 244-3000.

MARK MORSE
Grand Junction District Manager

Appendix 9

Description of BLM's Road Classifications and Road and Trail Maintenance Levels

Road Classifications. From (Interim Guidance) BLM Handbook H-9110-1, Transportation Planning (1/10/95)

Arterial Roads: The highest classification for a Bureau road. Arterial roads provide primary access to large blocks of land and major Bureau facilities, and connect with other arterial roads and /or public roads.

Collector Roads: The mid-level classification of a Bureau road. Collector roads normally serve a smaller area than Arterial roads, and connect Local roads to arterial Roads, or to public roads. Collector roads receive lower volumes, carry fewer traffic types, and generally serve fewer users.

Local Roads: The lowest classification and the lowest standard Bureau road. Local roads normally provide point access for resource management, and usually connect to Collector roads.

Maintenance Levels for Roads (6/96) From NARSC Information Bulletin No. RS-96-024 which define maintenance levels incorporated into revised FIMMS handbook, 6/19/96.

The assigned maintenance level reflects the appropriate maintenance that best fits the Transportation Management objectives for planned management activities. Roads will be prioritized for maintenance needs or may be maintained at lower levels depending upon funding.

Level 1: This level is assigned to roads where minimum maintenance is required to protect adjacent lands and resource values. These roads are no longer needed and are closed to traffic. The objective is to remove these roads from the transportation system.

Minimum standards for Level 1: Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless roadbed drainage is being adversely affected, causing erosion. Closure and traffic restrictive devices are maintained.

Level 2: This level is assigned to roads where the management objectives require the road to be opened for limited administrative traffic. Typically, these roads are passable by high clearance vehicles.

Minimum standards for Level 2: Drainages structures are to be inspected within a 3-year period and maintained as needed. Grading is conducted as necessary to correct drainage problems. Brushing is conducted as needed to allow administrative access. Slides may be left in place provided they do not adversely affect drainage.

Level 3: This level is assigned to roads where management objectives require the road to be open seasonally or year-round for commercial, recreation, or high volume administrative access. Typically, these roads are natural or aggregate surfaced, but may include low use bituminous surfaced roads. These roads have a defined cross section with drainage structures (e.g., rolling dips, culverts, or ditches). These roads may be negotiated by passenger cars travelling at prudent speeds. User comfort and convenience are not considered a high priority.

Minimum standards for Level 3: Drainages structures are to be inspected at least annually and maintained as needed. Grading is conducted to provide a reasonable level of riding comfort at prudent speeds for the road conditions. Brushing is conducted as needed to improve sight distance. Slides adversely affecting drainage would receive high priority for removal, otherwise they will be removed on a scheduled basis.

Level 4: This level is assigned to roads where management objectives require the road to be open all year (except may be closed or have limited access due to snow conditions) and which connect major administrative features (recreation sites, local road systems, administrative sites, etc.) to County, State, or Federal roads. Typically these roads are single or double lane, aggregate, or bituminous surface, with a higher volume of commercial and recreational traffic than administrative traffic.

Minimum standards for Level 4: The entire roadway is maintained at least annually, although a preventative maintenance program may be established. Problems are repaired as discovered.

Level 5: This level is assigned to roads where management objectives require the road to be open all year and are the highest traffic volume roads of the transportation system.

Minimum standards for Level 5: The entire roadway is maintained at least annually, and a preventative maintenance program is established. Problems are repaired as discovered. These roads may be closed or have limited access due to snow conditions.

Maintenance Levels for Trails (6/96)

The assigned maintenance level reflects the appropriate level of maintenance required to meet management objectives.

Level 1: These trails are closed to motorized and non-motorized use. This level is the minimum maintenance required to protect adjacent lands and resource values. The objective may be to remove these trails from the trail system.

Minimum standards for Level 1: Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Brushing and removal of hazards is not preformed unless trail drainage is being adversely affected, causing erosion. Closure devices are maintained.

Level 2: Low use trail with little or no contact between parties. Little or no monitoring or management of visitor use. Visitors may encounter obstructions like brush and deadfall.

Minimum standards for Level 2: Trail would require condition surveys once every year. Repairs will be done at the beginning of the use season to prevent environmental damage and maintain access. Emphasis is given to maintaining drainage and mitigating hazards. The trail may be signed "Not Regularly Maintained". Major repair may not be done for several seasons.

Level 3: Moderate use trail with visitor use on a seasonal and/or peak use period with frequent contact between parties. Trail management is conducted with occasional monitoring and management of visitor use. Visitors are not likely to encounter obstructions.

Minimum standards for Level 3: The trail shall have a minimum of one condition survey 1 to 2 times per season. Major repairs shall be completed annually. Maintenance shall be scheduled 2 to 3 times per season, if required, to repair the trail for environmental damage and to maintain access. Trail is kept in fair to good condition.

Level 4: High use trail used during specific times of the year with high frequencies of contact between parties. Regularly scheduled monitoring and management of visitor use.

Minimum standards for Level 4: Scheduled maintenance shall occur frequently (3 or 4 times per season) during the use season. Trail condition and accessibility for persons with disabilities is a major concern. Significant repairs shall be completed within 10 working days. Trail is kept in good to very good condition.

Level 5: A special high use trail with routine monitoring and management of visitor use.

Minimum standards for Level 5: Has a scheduled maintenance program. Trail condition and accessibility for persons with disabilities is a major concern. Significant repairs shall be completed within 2 to 3 working days. Trail is kept in excellent condition.

Appendix 10

Recreation Use Capacity Guidelines

Recreational use capacity can be determined using guidelines in accordance with the Recreation Opportunity Spectrum land classification system. These capacity guidelines can provide a management tool for establishing objectives aimed at maintaining the qualities of recreational experiences associated with the various recreation opportunity classes. The number of persons at one time in an area affects the sense of isolation from sights and sounds of other people that visitors perceive. Opportunities to 'get away' from others are important values public lands provide, and are highly valued by both motorized and non-motorized visitors. The capacity thresholds provide a gauge for evaluating use levels and determining when this quality may be impaired by growing visitor use, and corrective management action may be required.

Capacity evaluations can be conducted to allocate commercial recreational use for specific activities. Capacity for commercial use will be generally be established on a case-by-case basis at no more than 15% of the total available capacity, determined using either the travel route or land area-based method depending on the type of use. This travel plan does not implement specific maximum visitor capacities for any commercial activities, but does establish Recreation Opportunity Spectrum (ROS) designations which imply capacity may need to be considered when making decisions on commercial use permits.

The capacity coefficients prescribed for each recreation opportunity class vary depending on the character of the landscape setting. Settings vary in their capability to buffer the presence of visitors from each other, and this affects the number of people which may be in an area while maintaining the quality of the experience. Table 14 indicates the guidelines for determining capacities for travel routes and dispersed lands for settings with different buffering capabilities within the various recreation opportunity classes.

The buffer quotient (BQ) of an area describes the ability of the landscape to lessen or absorb the impact of manmade sights or sounds, and the presence of other visitors perceived by a given visitor. The quotient is mainly determined by topographic, terrain and vegetation features of an area. Travel corridors (roads and trails) and recreation use concentration areas are reference perspectives used in the evaluation of this landscape quality.

High BQ:

These areas contain high topographic variety and texture, with high local relief. The terrain is heavily dissected or interrupted by prominent valleys and ridges. These areas may also contain vegetation characterized by extensive mature to overmature forest or woodland, with old large trees. Visibility is nearly all the time interrupted by vegetation or topography, with views typically confined to the immediate foreground except for a few high vantage points.

Moderate BQ:

These areas contain moderate topographic variety, low texture and relatively low local relief. The terrain is relatively open, with few ridges or valleys. Vegetation is

mixed, with isolated tree stands or groves, young trees, open brush or meadow types. Visibility is largely interrupted by landscape features, with views at times confined to the immediate foreground but at times open to 1/2 mile or more.

Low BQ:

Topography in these areas is open with little or no local topographic variety or texture, and low local relief. The terrain is open and largely uninterrupted. Vegetation is characterized by sparse or no trees, small trees, low growing brush or grass, bare ground or rock. Visibility is uninterrupted nearly all the time, with open views throughout the area except for very few locally screened places.

Table 14: Recreational Use Capacity Guidelines, in Persons at One Time (PAOT) per mile of road or trail, or per acre throughout a land area.

Recreation Opportunity Class	Use Area	Capacity Range Coefficient		
		Low BQ	Moderate BQ	High BQ
Primitive	Travel Route PAOT/Mile	1/2 to 1	2	3
	Land Area PAOT/Acre	0.002	0.01	0.03
Semi-Primitive Non-Motorized	Travel Route PAOT/Mile	2 to 3	7	10
	Land Area PAOT/Acre	0.01	0.05	0.1
Semi-Primitive Motorized	Travel Route PAOT/Mile	2 to 3	7	10
	Land Area PAOT/Acre	0.01	0.05	0.1
Roaded Natural	Travel Route PAOT/Mile	7	10	15
	Land Area PAOT/Acre	0.1	1	2
Rural, Semi-Urban	Travel Route PAOT/Mile	10	20	30
	Land Area PAOT/Acre	1	5	8

Landscape Buffer Quotient (BQ)

Appendix 11

GLOSSARY of Terms and Acronyms

ADMINISTRATIVE ACCESS. Legal access to a road or trail solely for BLM management purposes and not for private or public use.

AFFECTED ENVIRONMENT. All aspects of the natural, physical surroundings that are affected by BLM management action, e.g. wildlife, soils, riparian areas, etc.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). An Area within the public lands where special management attention is required: (1) to protect and prevent irreparable damage to important and historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes; or (2) to protect life and afford safety from natural hazards.

BLM ROADS. Those roads owned and/or maintained by the BLM; generally, those roads providing administrative and/or public access on BLM-managed public lands.

CULTURAL RESOURCES. Those fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events.

DESIGNATED ROADS AND TRAILS. Roads and trails which have been officially designated by the BLM for specific uses, such as motorized or non-motorized; these roads are often signed and marked on maps to indicate the designation.

DISPERSED RECREATION. Areas where recreational opportunities are not

managed in a concentrated or developed setting.

ENVIRONMENTAL EFFECTS. Impacts upon the natural, physical environment which are the result of BLM management action.

FACILITY. Any building, structure, or development created and maintained by the BLM on public lands, such as a campground, restroom, visitor center, kiosk, etc.

INTENSIVE OHV USE AREA. An area specifically designated by the BLM for on- and off- road use by off-highway and all-terrain vehicles (OHVs and ATVs); intensive uses may include hill-climbing, trail riding, motorcycle racing, etc.

INTERIM WILDERNESS MANAGEMENT POLICY (IWMP). Policies under which the BLM will manage lands under wilderness review until Congress either designates these lands as wilderness or releases them for other purposes.

LANDSCAPE-BASED AREA. A contiguous area with homogeneous landscape features, such as rangeland, a riparian area, high mountain terrain, etc.

MOTORIZED ACCESS. Access, camping, roads, recreation, and roads for which the use of motorized vehicles is permitted, such as automobiles, motorcycles, and off-highway and all-terrain vehicles (OHVs and ATVs).

NATIONAL ENVIRONMENTAL PROTECTION ACT OF 1969 (NEPA). Public Law 91-190. Establishes environmental policy for the nation. Among other items, NEPA requires

federal agencies to consider environmental values in decision-making processes.

NON-MOTORIZED ACCESS. Access, roads, trails, etc. for which only the use of non-motorized or mechanized means of transportation is allowed, such as travel by foot, horseback, or mountain bike.

OFF-HIGHWAY VEHICLE (OHV). Generally a four-wheel drive vehicle with high clearance which is capable of negotiating unpaved roads and trails.

PLANNING UNIT. A geographic area and boundary surrounding public lands, designated by the BLM, and for which a resource management or activity plan is prepared.

PRIMITIVE. Non-motorized and non-developed types of outdoor recreational activities.

PRIVATE ACCESS. Access to public lands via private roads which are open only to the landowners and not to BLM or the public.

PROPOSED ACTION. The management alternative developed and recommended after consideration of the input on various originally identified alternatives.

PROTEST/APPEAL PERIOD. A 30 day period in which protests and appeals can be made following the release of a decision record.

PUBLIC ACCESS. Access to public lands by State, County, or private roads and trails which are legally open to the public.

PUBLIC LANDS. Federally-owned lands managed by the BLM for multiple uses and the benefit of the American public

RECREATION OPPORTUNITY SPECTRUM (ROS). A method used to characterize recreation opportunities in terms of settings, activity, and experience opportunities.

RECREATIONAL VISITOR DAYS (RVDs). The presence of persons on an area of land or water for the purpose of engaging in a recreational activity during all or part of a calendar day.

RESOURCE MANAGEMENT PLAN (RMP). A land use plan that establishes land use allocations, multiple-use guidelines, and management objectives for a given planning area. The RMP planning system has been used by the BLM since about 1980.

REVISED PROPOSED ACTION. The management alternative developed and recommended by the BLM after consideration of the input on the originally identified alternatives and the subsequent Proposed Action.

RIPARIAN-WETLAND INITIATIVE. A program the BLM launched in 1991 that set forth goals and strategies to restore, protect, maintain, and provide information on at least 75% of riparian-wetland areas by 1997.

SCENIC QUALITY. The degree of harmony, contrast, and variety within a landscape.

SEASONAL CLOSURE. The legal closure of a road or trail by the BLM during a specific period each year to protect critical, fragile, or important values.

SENSITIVE SPECIES. A designation which is applied to species: (1) not yet officially listed but which are under-going status review or are proposed for listing,

(2) whose populations are consistently small and widely dispersed, or (3) whose numbers are declining rapidly

SPECIAL RECREATION MANAGEMENT AREA (SRMA). An area that possesses outstanding recreation resources that require specific recreation management to achieve the Bureau's recreation objectives to provide specific recreation opportunities

TRAVEL MANAGEMENT DESIGNATIONS. All public lands managed by the BLM are designated as either (1) Open, (2) Limited, or (3) Closed

VISUAL RESOURCE MANAGEMENT (VRM). The planning, designing, and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

WATER QUALITY MANAGEMENT AREA (WQMA). An area where fragile or erodible soils lead to water quality problems.

WATERSHED MANAGEMENT. The management of grazing, recreation, fire, soils, vegetation and geologic types as they relate to water quality in a topographical region or area delineated by water draining to a particular water course or body of water.

WILDERNESS CHARACTERISTICS. Identified by Congress in the Wilderness Act of 1964; namely, size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archeological, historical, ecological, scenic, or other features.

WILDERNESS STUDY AREA (WSA). A roadless area which has wilderness characteristics (thus having the potential of being included in the National

Wilderness Preservation System), and which has been subjected to intensive analysis by the Bureau and public review to determine wilderness suitability and is not yet the subject of a congressional decision regarding designation of wilderness.

LIST OF ACRONYMS

4X4	Four-wheel Drive Vehicle
4WD	Four-wheel Drive Vehicle
ACEC	Area of Critical Environmental Concern
AD	Administrative Determination
ATV	All-terrain vehicle
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CDOW	Colorado Division of Wildlife
DF&G	Department of Fish and Game (Idaho)
EA	Environmental Assessment
EACP	Eagle Area Community Plan
ECMP	Eagle County Master Plan
ERMP	Eagle River Management Plan
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
GMU	Game Management Unit
GSRA	Glenwood Springs Resource Area
IWMP	Interim Wilderness Management Policy
NARSC	National Applied Science Research Center
NEPA	National Environmental Protection Act
OHV	Off-highway Vehicle
ROS	Recreation Opportunity Spectrum
RMP	Resource Management Plan
SRMA	Special Recreation Management Area
SRP	Special Recreation Permits
WQMA	Water Quality Management Area
WSA	Wilderness Study Area
VRM	Visual Resource Management

Literature Citations

- Braun, Clait, Colorado Division of Wildlife, Personal communication, 1996.
- BLM, 1994. Glenwood Springs Resource Area Travel Management Assessment.
- Byrne, Gene, CDOW, personal communication, 1997.
- CDOW, July 1996. "Colorado Big Game Harvest 1995".
- CDOW, 1997. Western Colorado Big Game Hunting, Northwestern Units.
- Edge, W. Daniel and C. Les Marcum, 1991. "Topography Ameliorates the Effects of Roads and Human Disturbance on Elk". Elk Vulnerability Symposium, Montana State Univ., Bozeman, MT, pp. 132-137.
- Hornecker, M.G., 1970. "An Analysis of Mountain Lion Predation upon Mule Deer and Elk in the Idaho Primitive Area". Wildlife Monograph: 21. 39 pp.
- Leptich, David J. and Peter Zager, 1991. "Road Access Management Effects on Elk Mortality and Population Dynamics". Elk Vulnerability Symposium, Montana State Univ., Bozeman, MT, pp. 126-131.
- Moroz, Paul, 1991. "Managing Access to Affect Elk Vulnerability". Elk Vulnerability Symposium, Montana State Univ., Bozeman, MT, pp. 138-141.
- Shaw, Harley G., 1975. "Impact of Mountain Lion on Mule Deer and Cattle in Northwestern Arizona". Proceedings of the 1975 Predator Symposium. 16 pp.
- Stalling, David, 1996. "The Chamberlain Study, What Makes Elk Insecure", Rocky Mountain Elk Foundation Bugle, Winter, 1996.

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BLM

Getting Around in the

Castle Peak Area

Today and Tomorrow...

Eagle County, Colorado

FINAL TRAVEL MANAGEMENT PLAN MAP SUPPLEMENT



Department of the Interior
Bureau of Land Management
Glenwood Springs Resource Area
(5/97)

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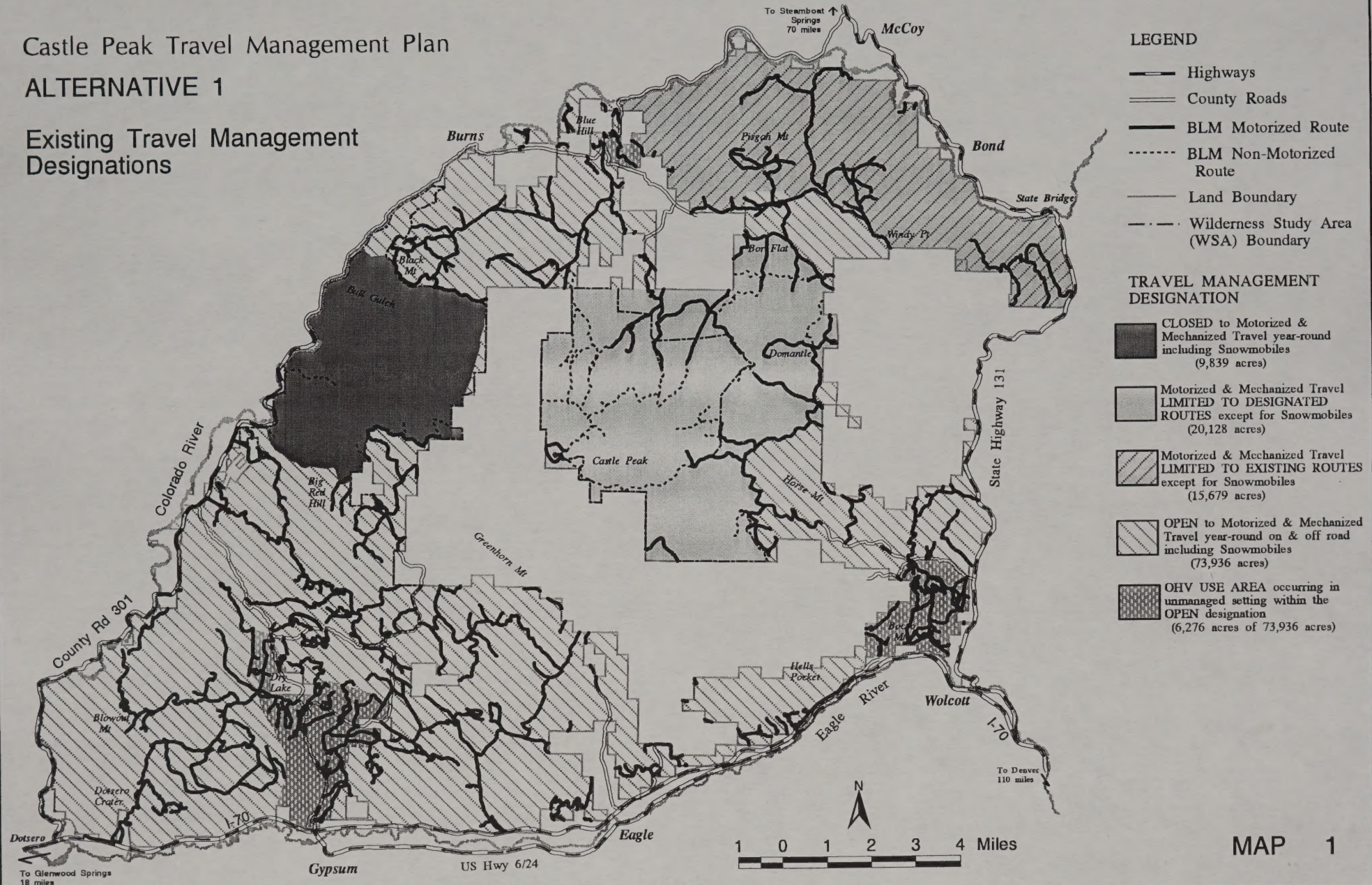
MAP SUPPLEMENT TRAVEL MANAGEMENT PLAN FINAL

MTB



Castle Peak Travel Management Plan ALTERNATIVE 1

Existing Travel Management Designations



Castle Peak Travel Management Plan

ALTERNATIVE 1

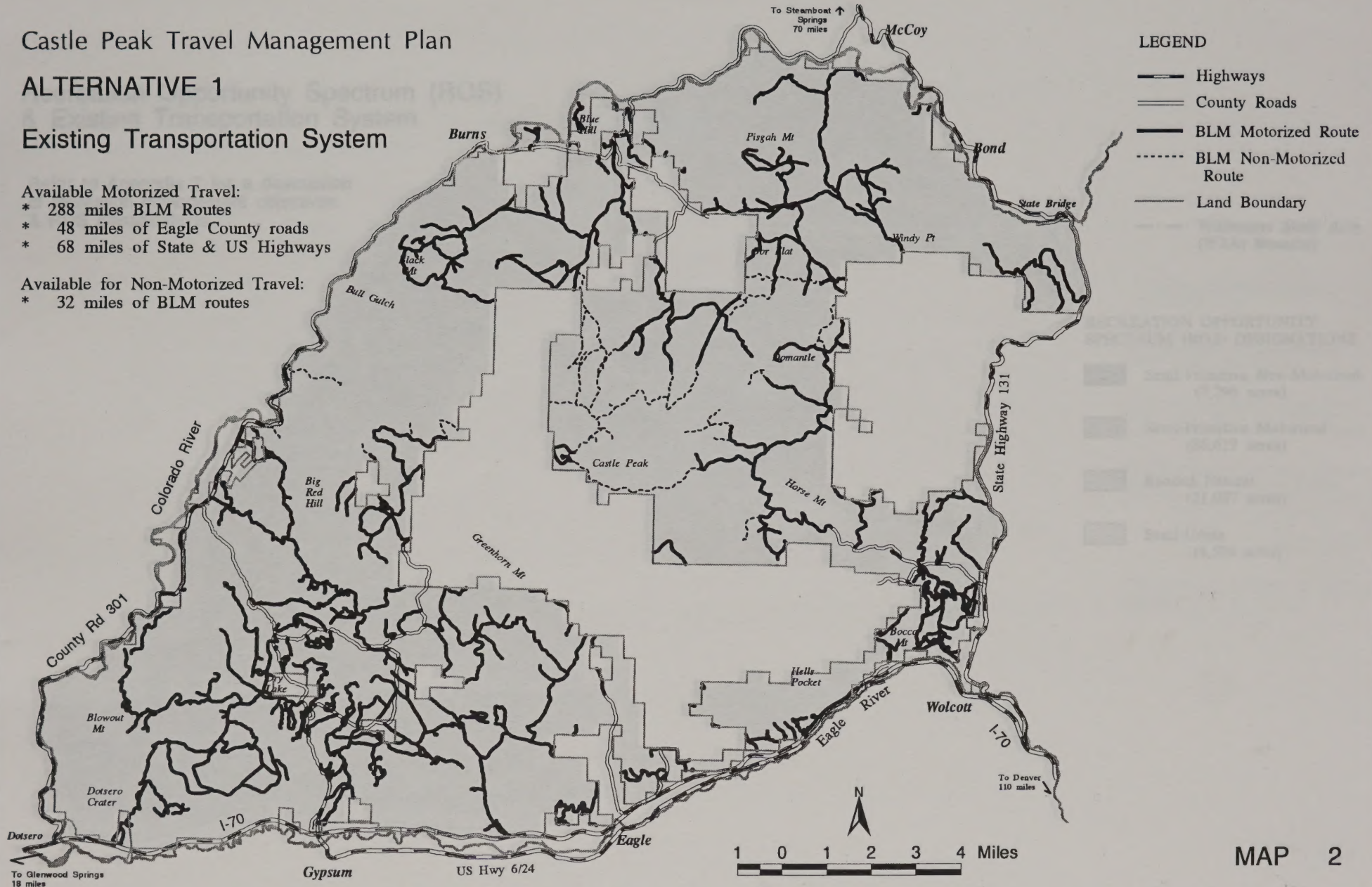
Existing Transportation System

Available Motorized Travel:

- * 288 miles BLM Routes
- * 48 miles of Eagle County roads
- * 68 miles of State & US Highways

Available for Non-Motorized Travel:

- * 32 miles of BLM routes





- железная дорога
- шоссе
- автомобильная дорога
- граница области
- граница республики
- граница страны
- граница моря

Самара
Саратов
Волгоград
Сталинград
Куйбышев
Самарканд
Ташкент
Фрунзе
Душанбе
Бухара
Хива
Ашгабат
Баку
Ереван
Тбилиси
Сухуми
Грозный
Магас
Владикавказ
Пятигорск
Ставрополь
Кисловодск
Минеральные Воды
Армавир
Новороссийск
Сочи
Геленджик
Анапа
Туапсе
Светлогорск
Джубга
Абхазский округ
Грузия
Азербайджан
Армения
Грузинская ССР
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Армянская ССР

Самара

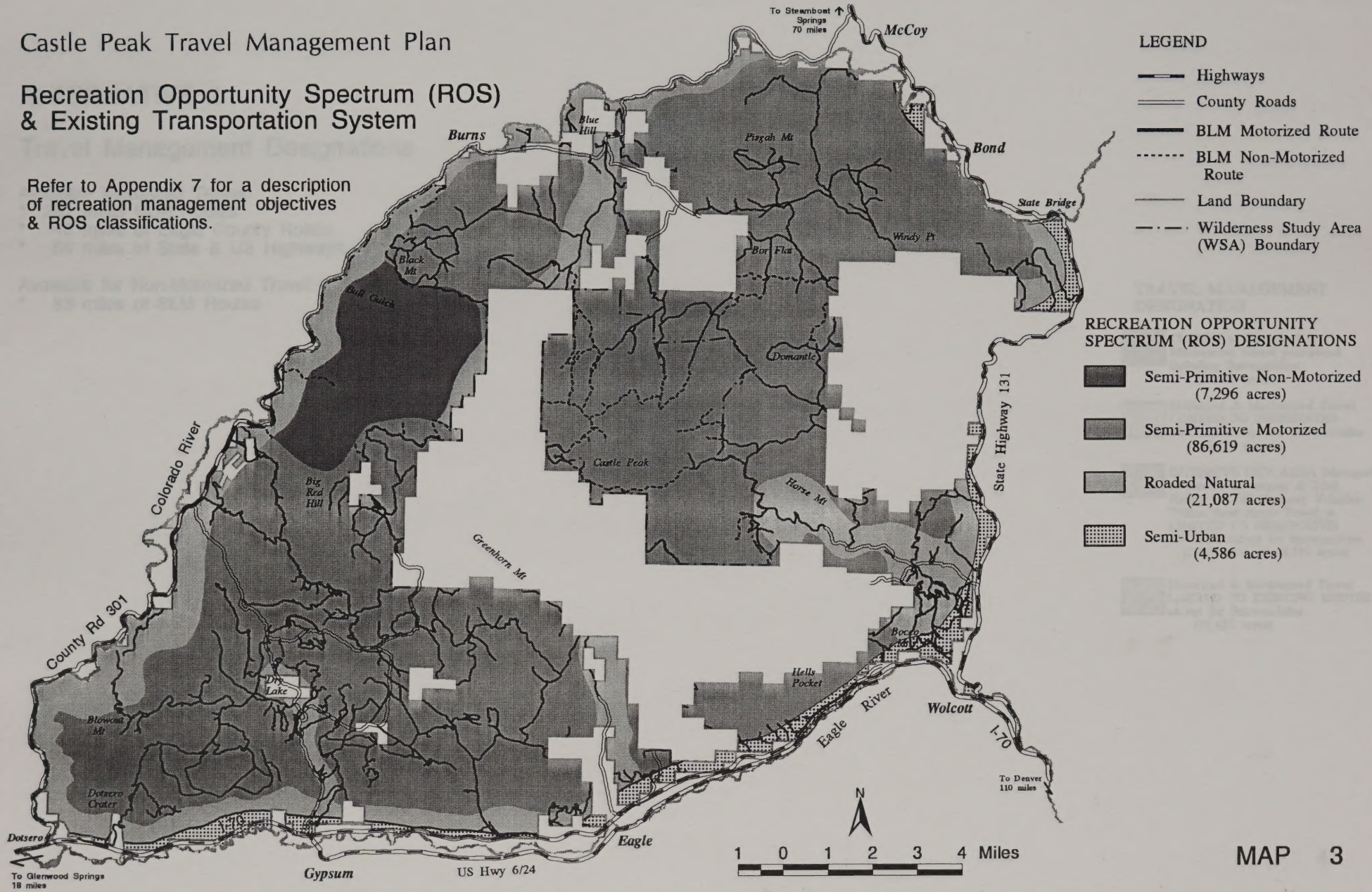
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Castle Peak Travel Management Plan

Recreation Opportunity Spectrum (ROS) & Existing Transportation System

Refer to Appendix 7 for a description of recreation management objectives & ROS classifications.



Castle Peak Travel Management Plan

ALTERNATIVE 2

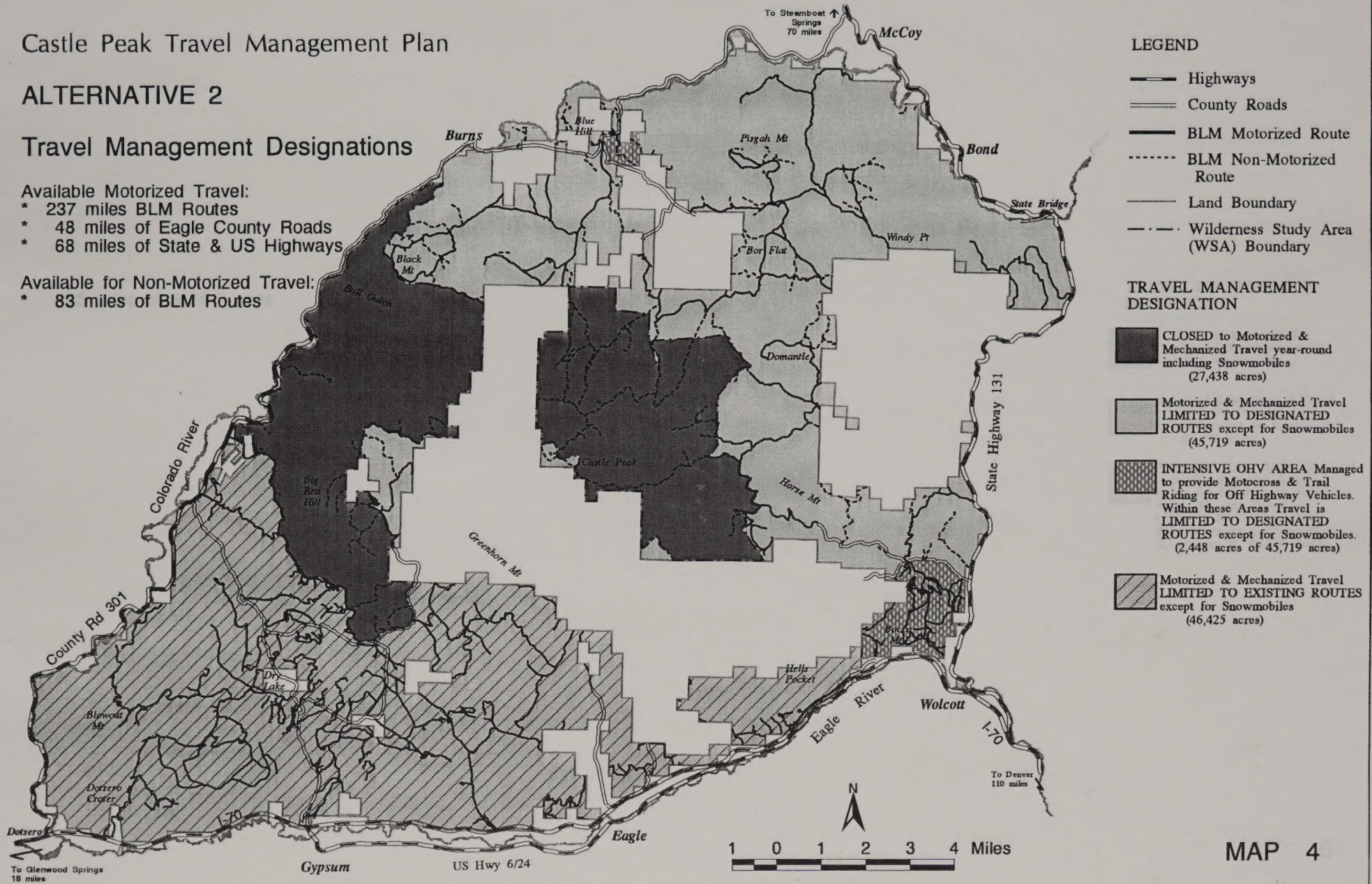
Travel Management Designations

Available Motorized Travel:

- * 237 miles BLM Routes
- * 48 miles of Eagle County Roads
- * 68 miles of State & US Highways

Available for Non-Motorized Travel:

- * 83 miles of BLM Routes



Castle Peak Travel Management Plan

ALTERNATIVE 3

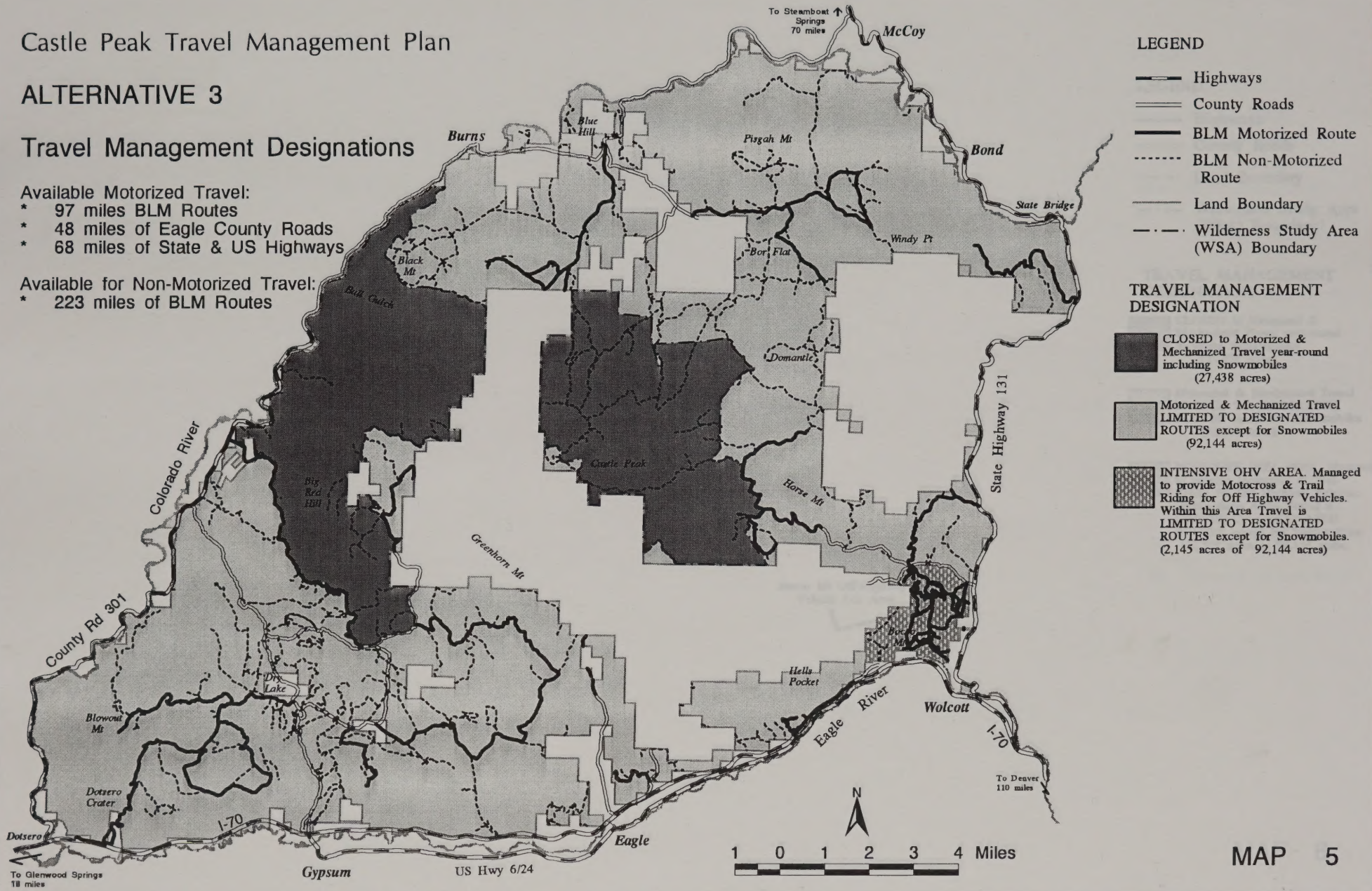
Travel Management Designations

Available Motorized Travel:

- * 97 miles BLM Routes
- * 48 miles of Eagle County Roads
- * 68 miles of State & US Highways

Available for Non-Motorized Travel:

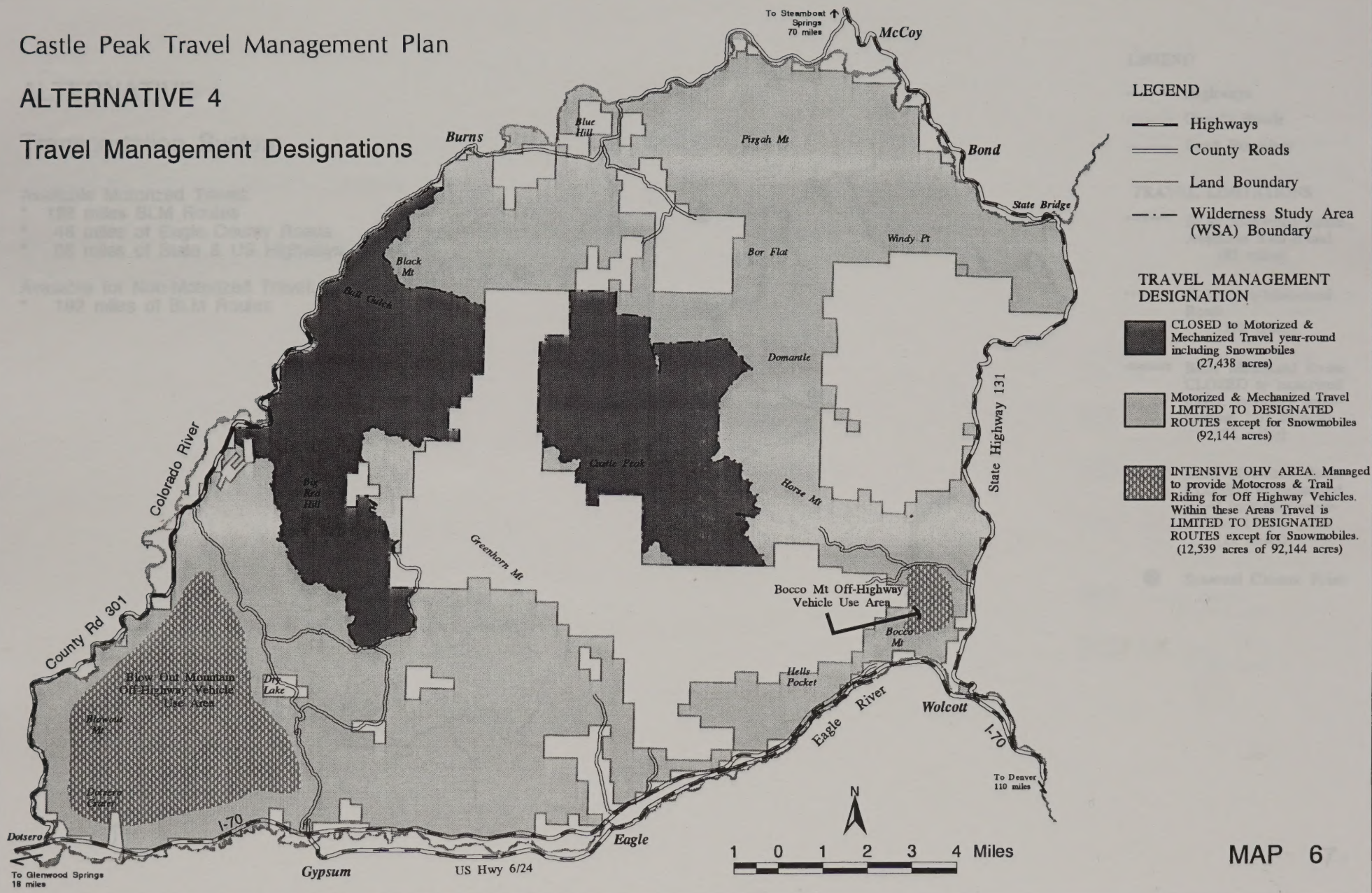
- * 223 miles of BLM Routes

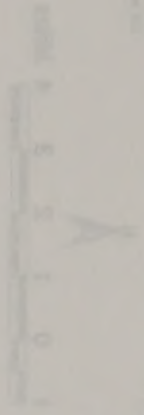


Castle Peak Travel Management Plan

ALTERNATIVE 4

Travel Management Designations





- LEGEND
- County boundaries
 - Major cities
 - Minor cities
 - Water bodies
 - Topography
 - Political boundaries
 - Other features

Castle Peak Travel Management Plan

ALTERNATIVE 4

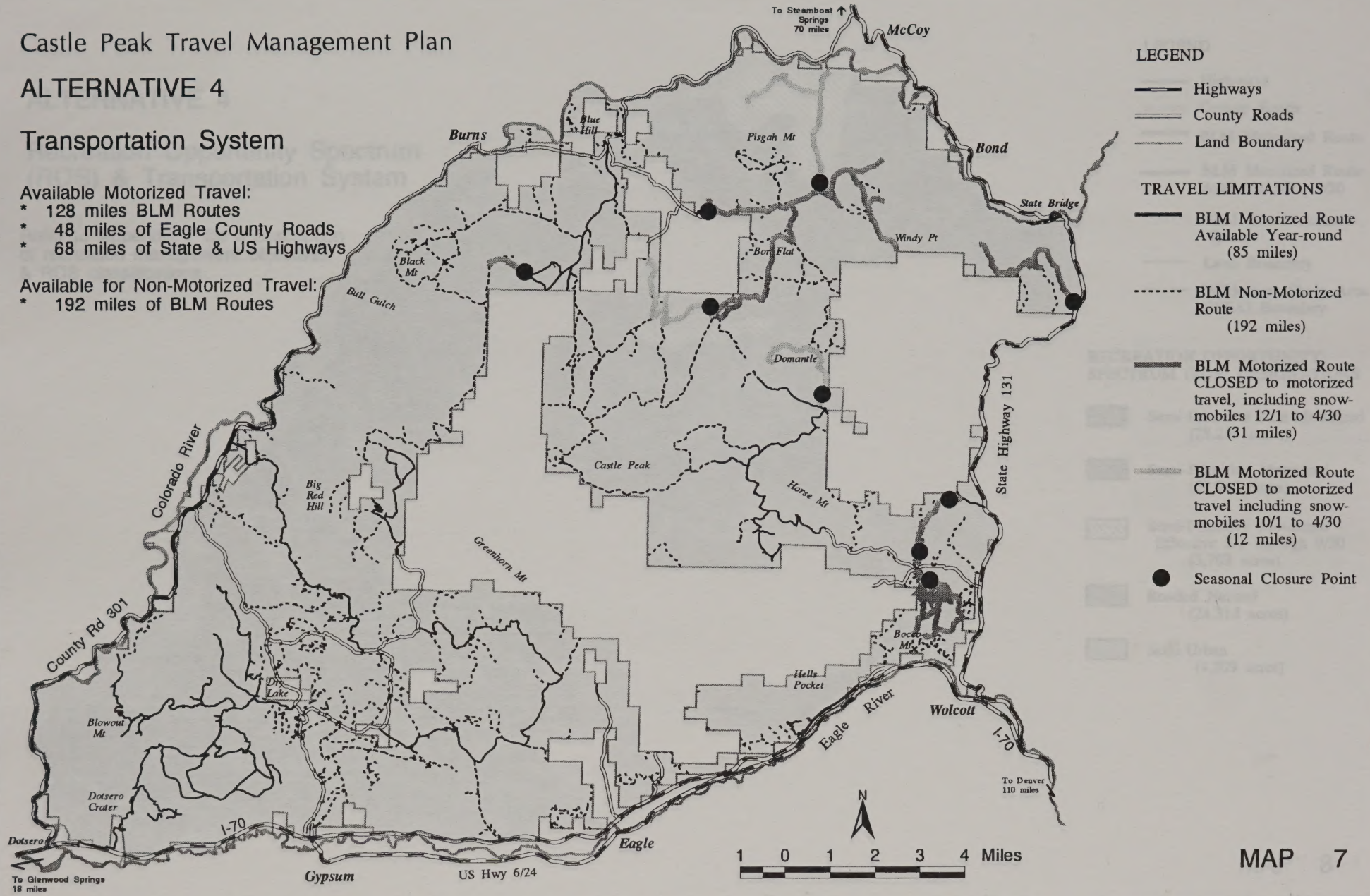
Transportation System

Available Motorized Travel:

- * 128 miles BLM Routes
- * 48 miles of Eagle County Roads
- * 68 miles of State & US Highways

Available for Non-Motorized Travel:

- * 192 miles of BLM Routes

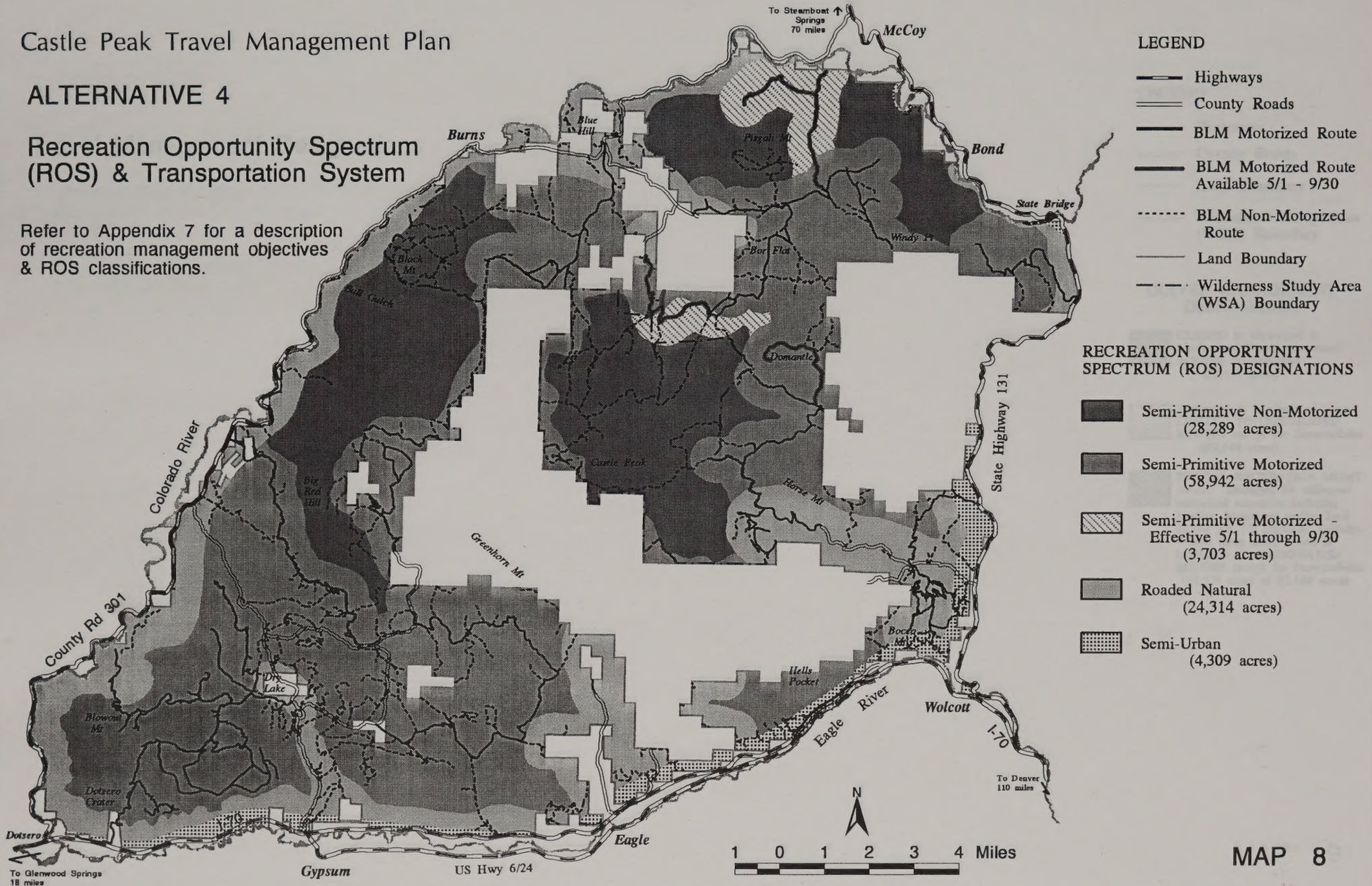


Castle Peak Travel Management Plan

ALTERNATIVE 4

Recreation Opportunity Spectrum (ROS) & Transportation System

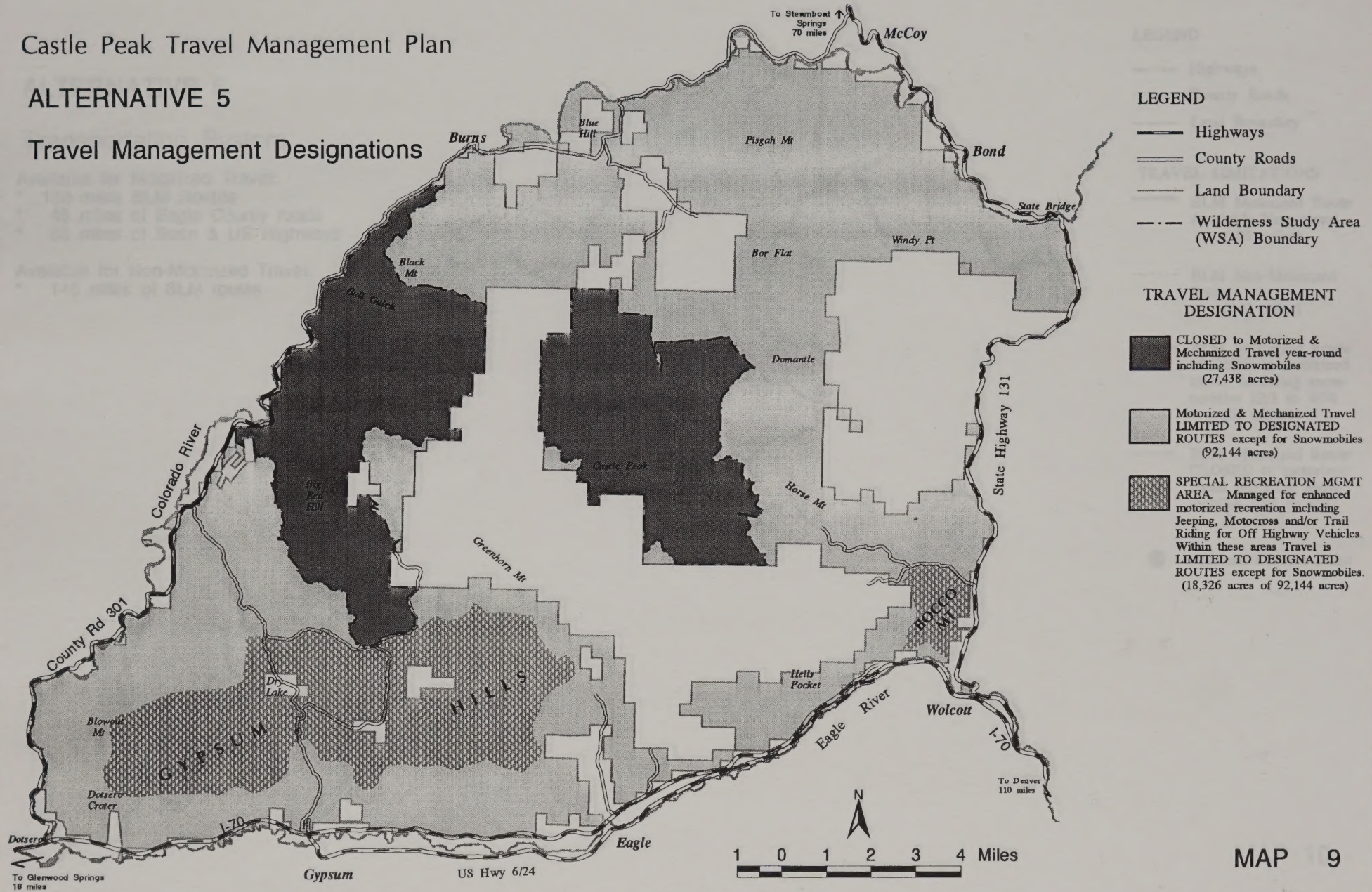
Refer to Appendix 7 for a description of recreation management objectives & ROS classifications.



Castle Peak Travel Management Plan

ALTERNATIVE 5

Travel Management Designations



Castle Peak Travel Management Plan

ALTERNATIVE 5

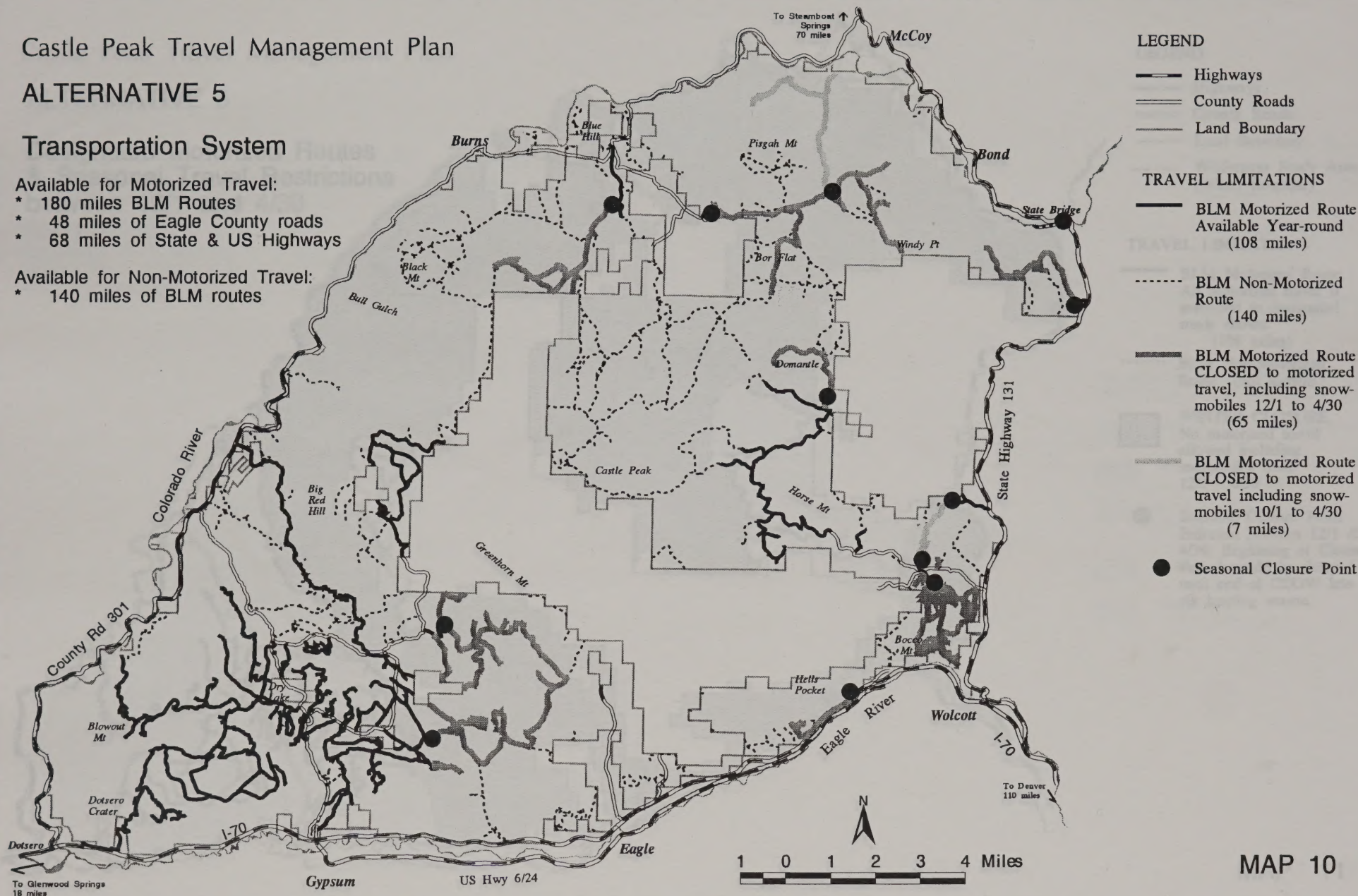
Transportation System

Available for Motorized Travel:

- * 180 miles BLM Routes
- * 48 miles of Eagle County roads
- * 68 miles of State & US Highways

Available for Non-Motorized Travel:

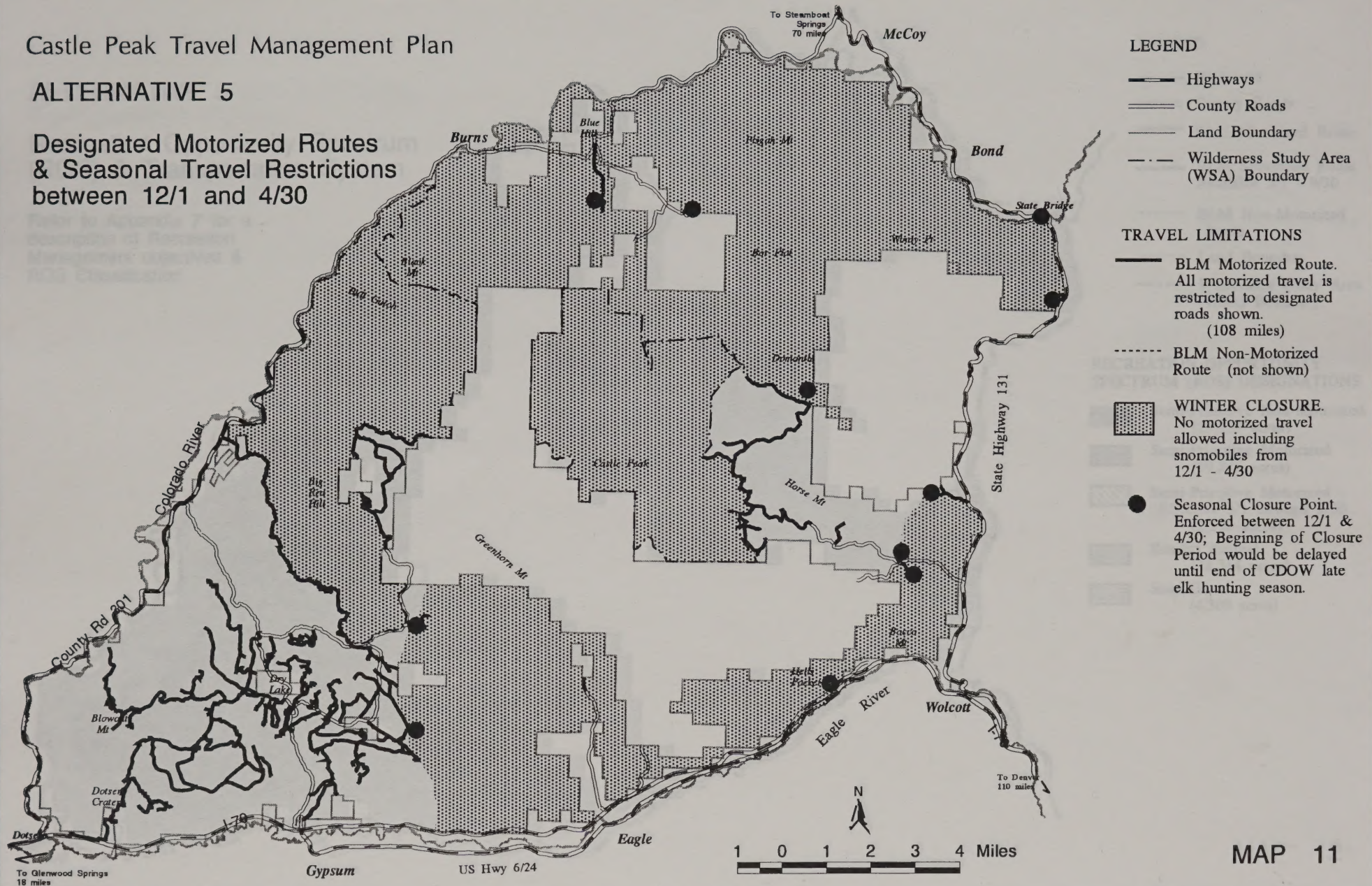
- * 140 miles of BLM routes



Castle Peak Travel Management Plan

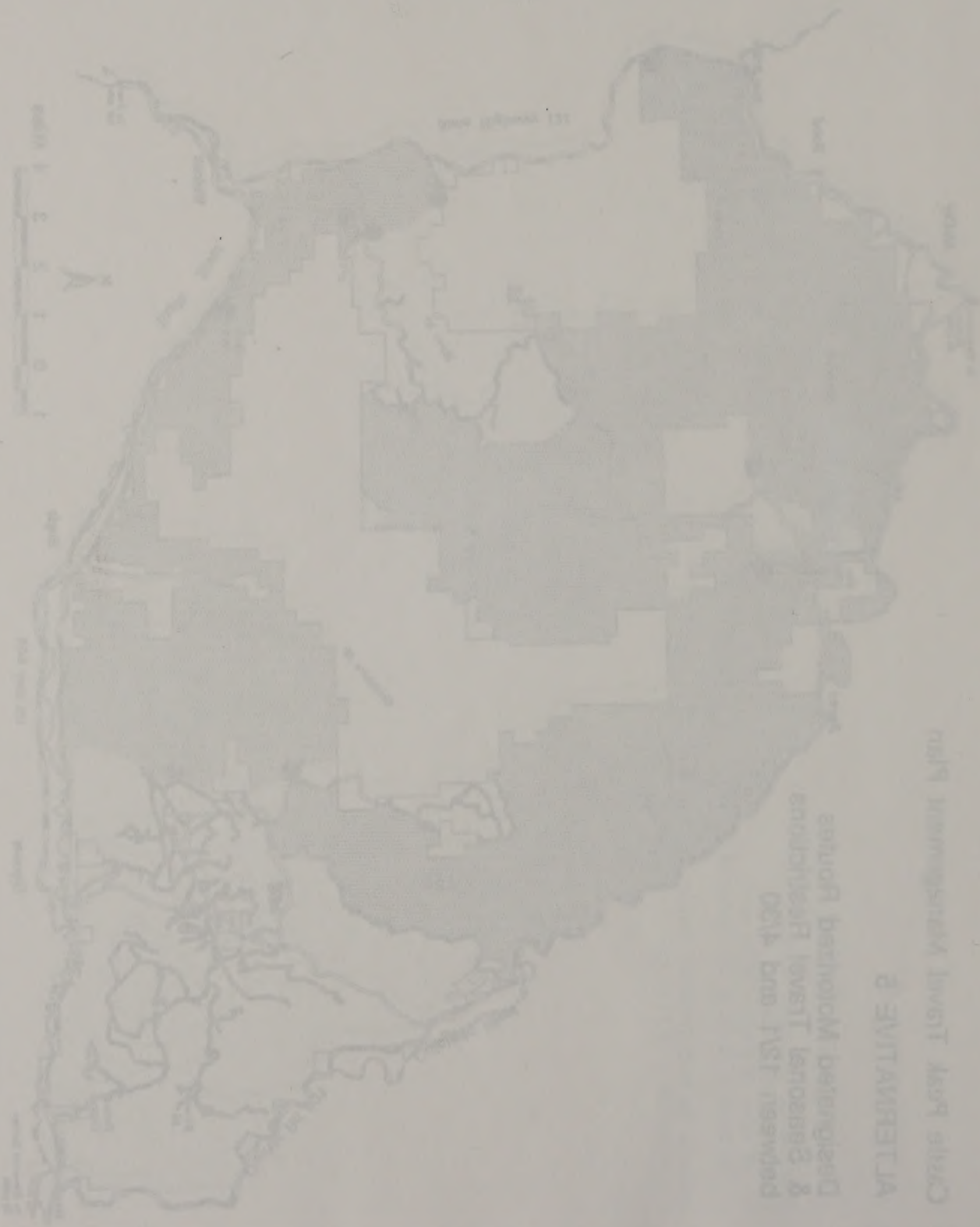
ALTERNATIVE 5

Designated Motorized Routes
& Seasonal Travel Restrictions
between 12/1 and 4/30



Legend

- Boundary
- Road
- River
- Lake
- Forest
- Cultivated land
- Urban area
- Mountain
- Plain
- Hills
- Swamp
- Salt marsh
- Beach
- Island
- Shoal
- Reef
- Bank
- Spit
- Headland
- Peninsula
- Strait
- Sound
- Bay
- Gulf
- Sea
- Ocean



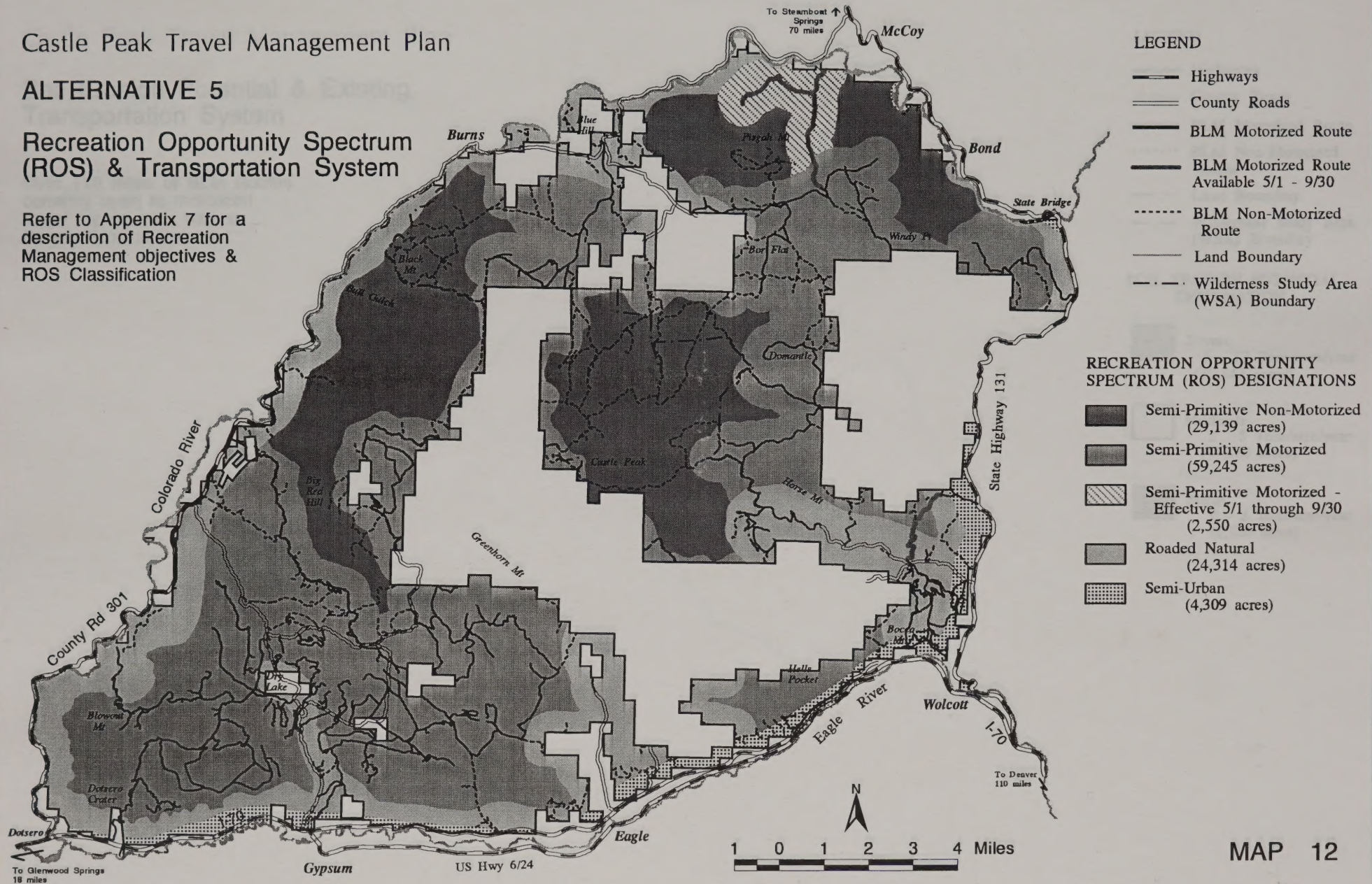
Map of the Republic of Armenia
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Castle Peak Travel Management Plan

ALTERNATIVE 5

Recreation Opportunity Spectrum (ROS) & Transportation System

Refer to Appendix 7 for a description of Recreation Management objectives & ROS Classification





Map of the Khatanga River Basin showing various land use and vegetation types. The map includes a legend with 11 categories, a scale bar (0-10 km), and a north arrow.

Map of the Khatanga River Basin showing various land use and vegetation types. The map includes a legend with 11 categories, a scale bar (0-10 km), and a north arrow.

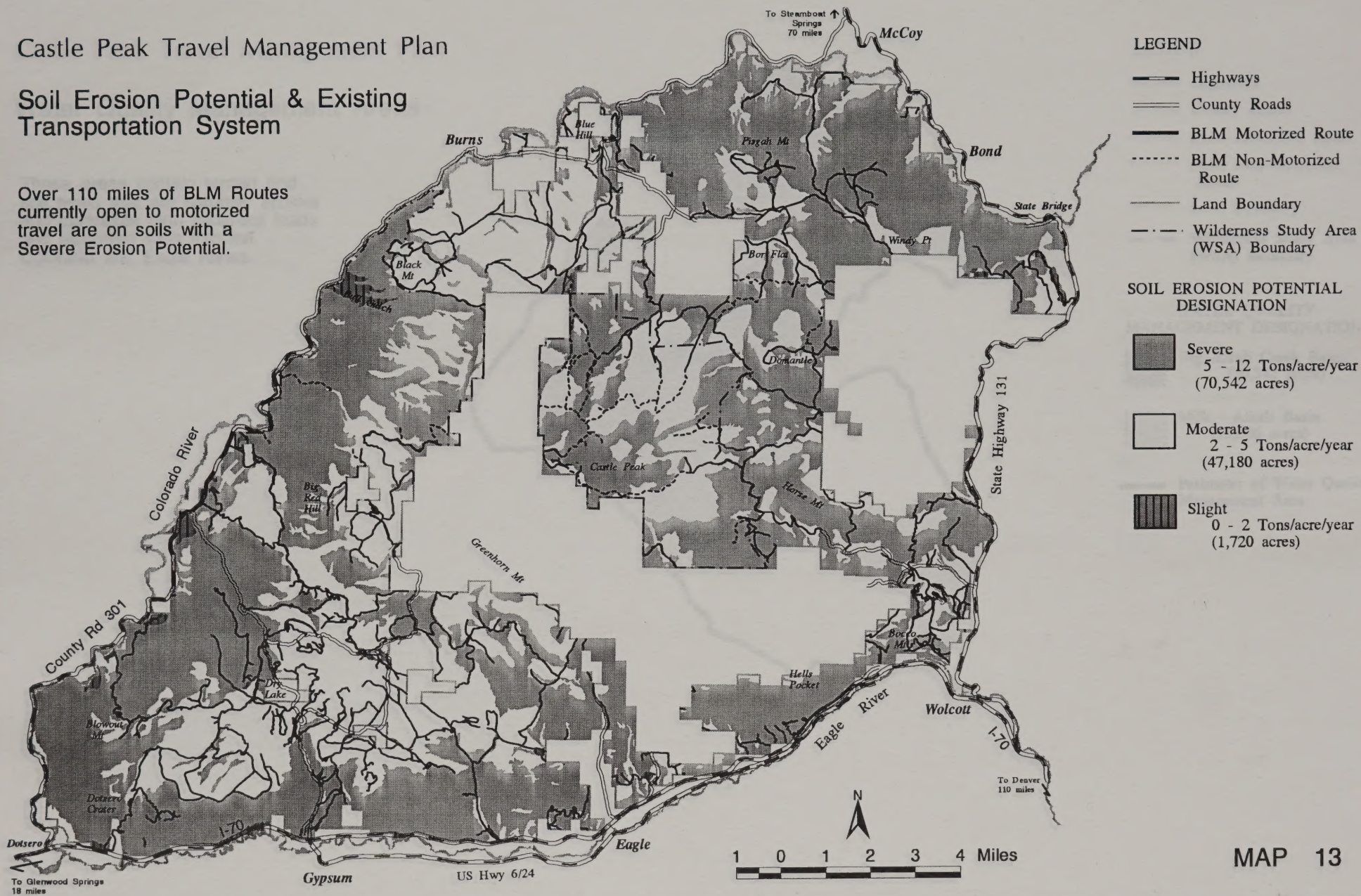
Map of the Khatanga River Basin showing various land use and vegetation types. The map includes a legend with 11 categories, a scale bar (0-10 km), and a north arrow.

Map of the Khatanga River Basin showing various land use and vegetation types. The map includes a legend with 11 categories, a scale bar (0-10 km), and a north arrow.

Castle Peak Travel Management Plan

Soil Erosion Potential & Existing Transportation System

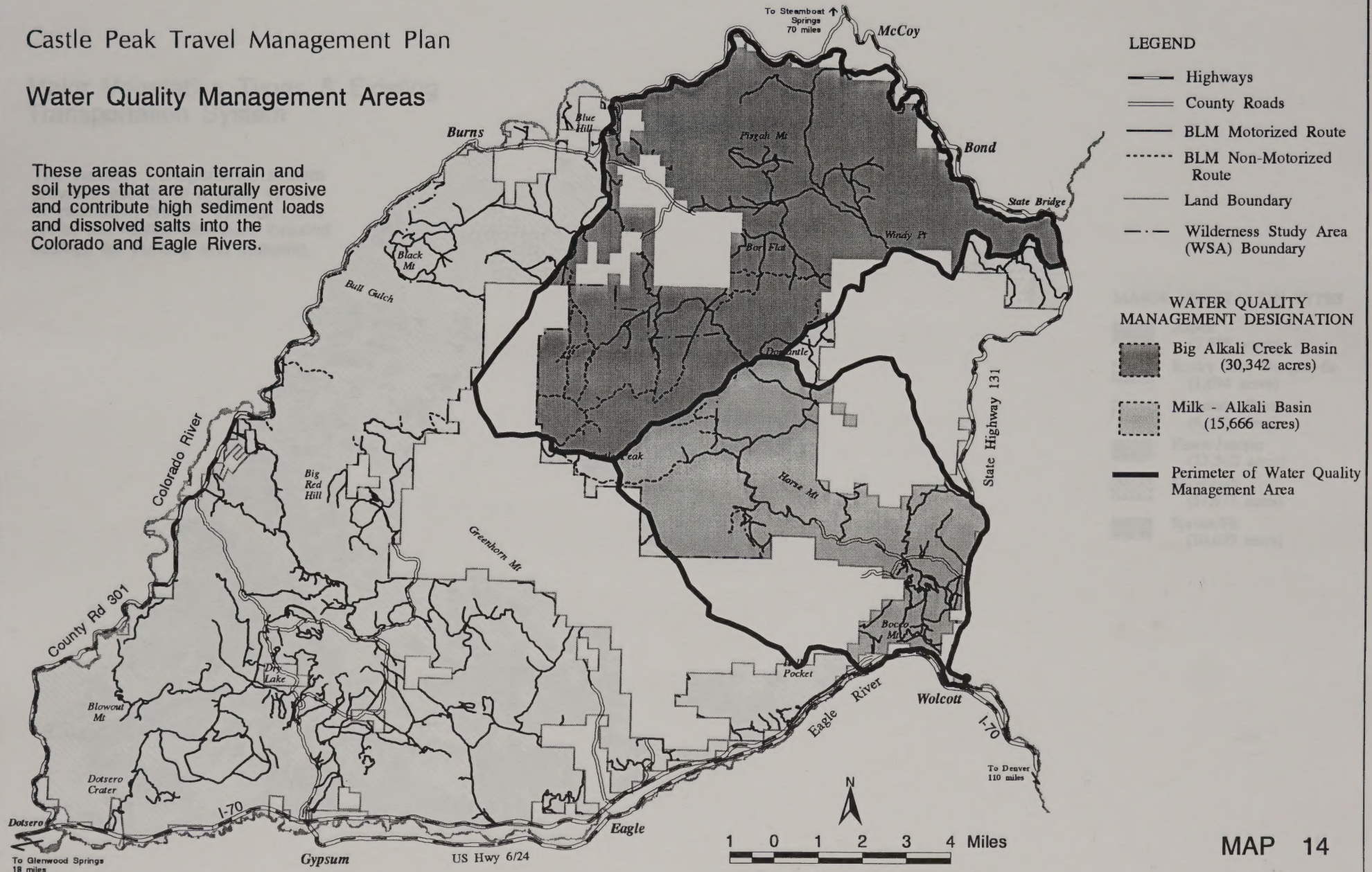
Over 110 miles of BLM Routes currently open to motorized travel are on soils with a Severe Erosion Potential.



Castle Peak Travel Management Plan

Water Quality Management Areas

These areas contain terrain and soil types that are naturally erosive and contribute high sediment loads and dissolved salts into the Colorado and Eagle Rivers.



Major Vegetation Types & Existing Transportation System

Castle Peak Travel Management Plan

Major Vegetation Types & Existing Transportation System

The current transportation system provides access to a great variety of vegetation types. Visitors often prefer the higher elevation, forested settings for hunting and camping.

LEGEND

- Highways
- County Roads
- BLM Motorized Route
- BLM Non-Motorized Route
- Land Boundary
- Wilderness Study Area (WSA) Boundary

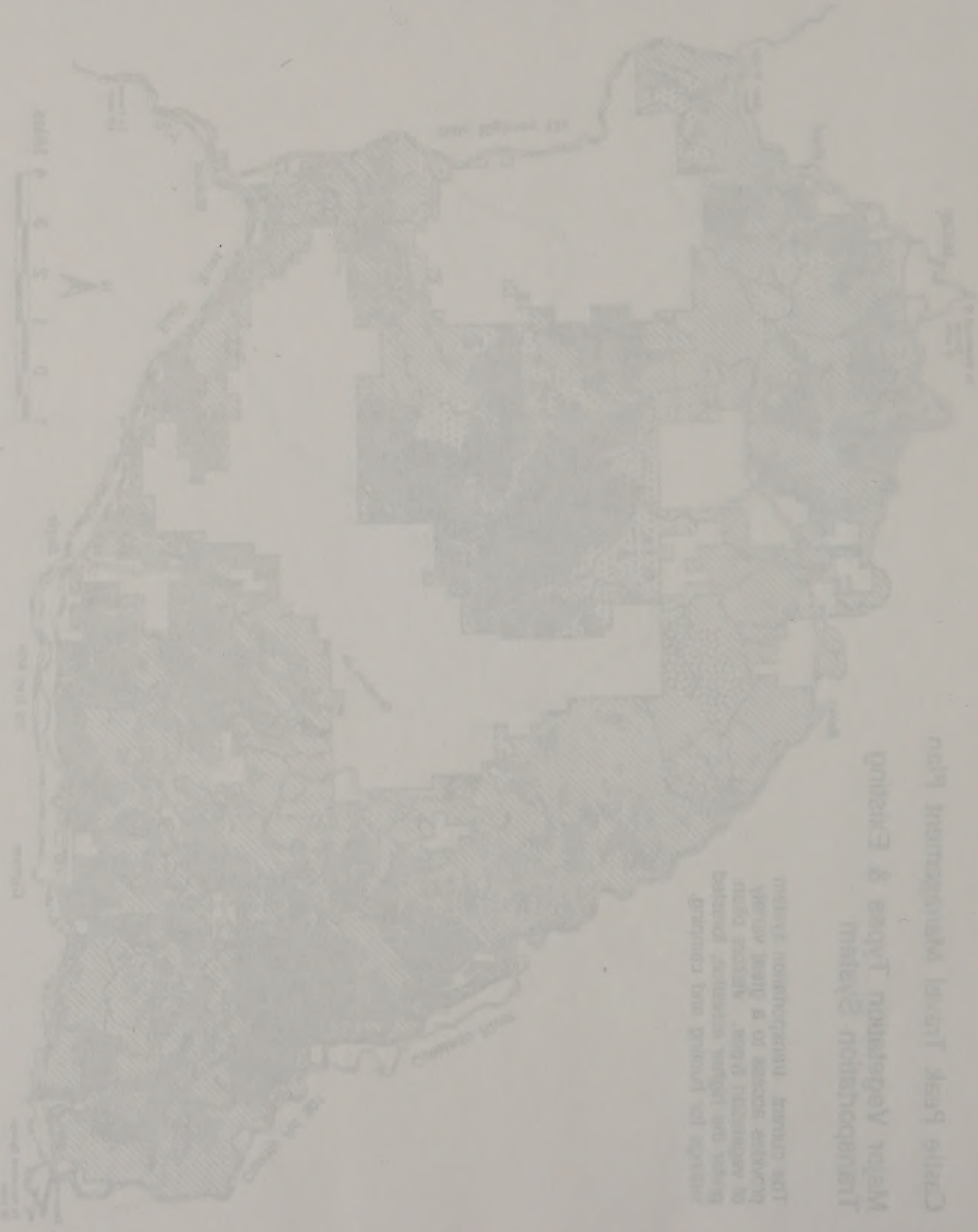
MAJOR VEGETATION TYPES

- Aspen (5,638 acres)
- Rocky Mtn Douglas-fir (1,694 acres)
- Mountain Brush (6,665 acres)
- Pinon-Juniper (37,362 acres)
- Sagebrush (57,677 acres)
- Spruce/Fir (10,039 acres)

MAP 15

- Highways
- County Roads
- BLM Motorized Route
- BLM Non-Motorized Route
- Land Boundary
- Wilderness Study Area (WSA) Boundary

	Aspen (5,638 acres)
	Rocky Mtn Douglas-fir (1,694 acres)
	Mountain Brush (6,665 acres)
	Pinon-Juniper (37,362 acres)
	Sagebrush (57,677 acres)
	Spruce/Fir (10,039 acres)



- LEGEND**
- International boundary
 - State boundary
 - Administrative district boundary
 - Major city
 - City
 - Settlement
 - Settlement (population 10,000 and above)
 - Settlement (population 5,000 and above)
 - Settlement (population 2,000 and above)
 - Settlement (population 1,000 and above)
 - Settlement (population 500 and above)
 - Settlement (population 200 and above)
 - Settlement (population 100 and above)
 - Settlement (population 50 and above)
 - Settlement (population 20 and above)
 - Settlement (population 10 and above)
 - Settlement (population 5 and above)
 - Settlement (population 2 and above)
 - Settlement (population 1 and above)
 - Settlement (population 0 and above)

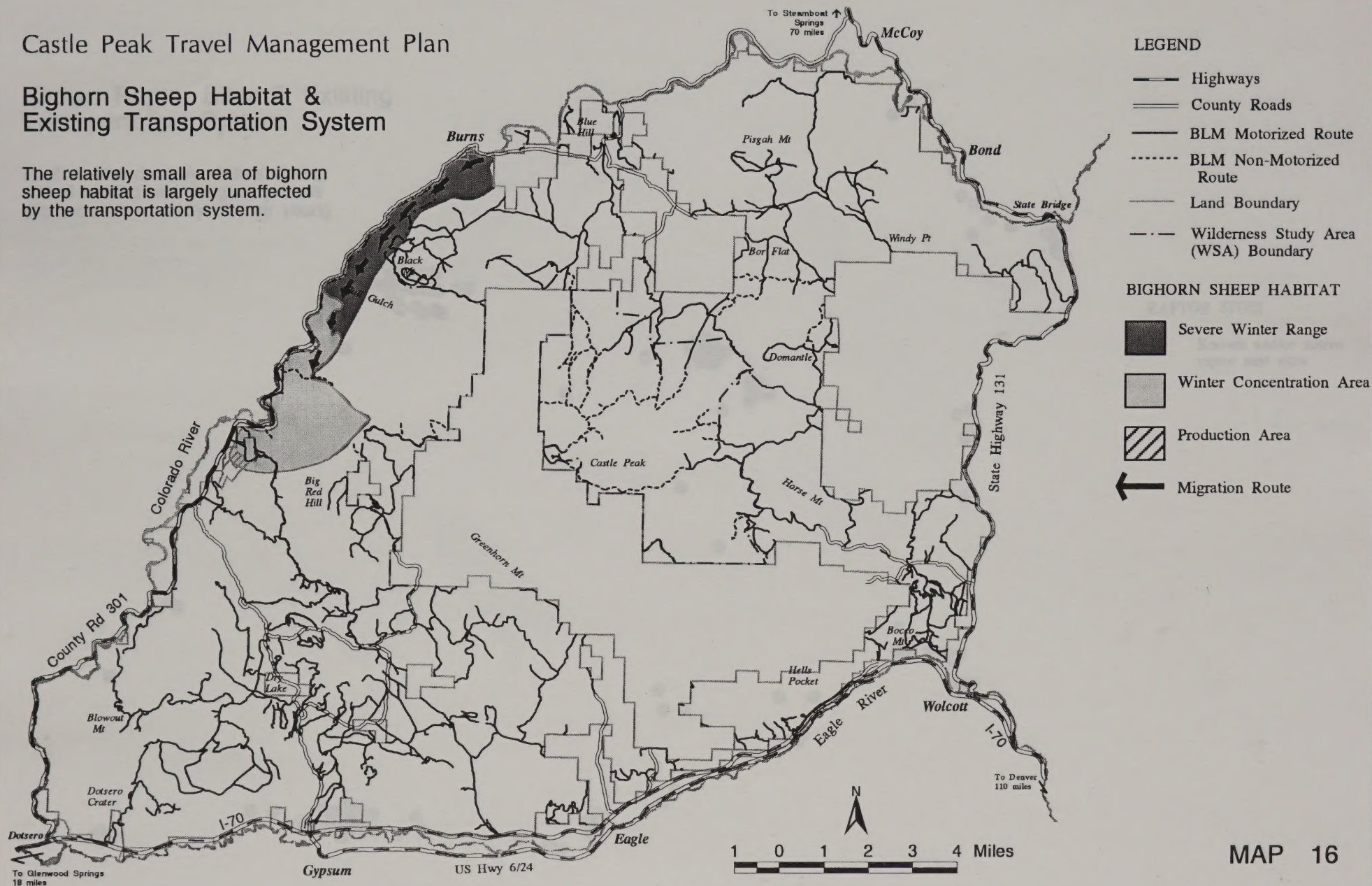
Հանրապետության տարածքը
 1994 թվականի դեկտեմբերի 1-ի դրությամբ
 արտահայտվում է հետևյալ տվյալներով:

Հանրապետության տարածքը
 1994 թվականի դեկտեմբերի 1-ի դրությամբ

Castle Peak Travel Management Plan

Bighorn Sheep Habitat & Existing Transportation System

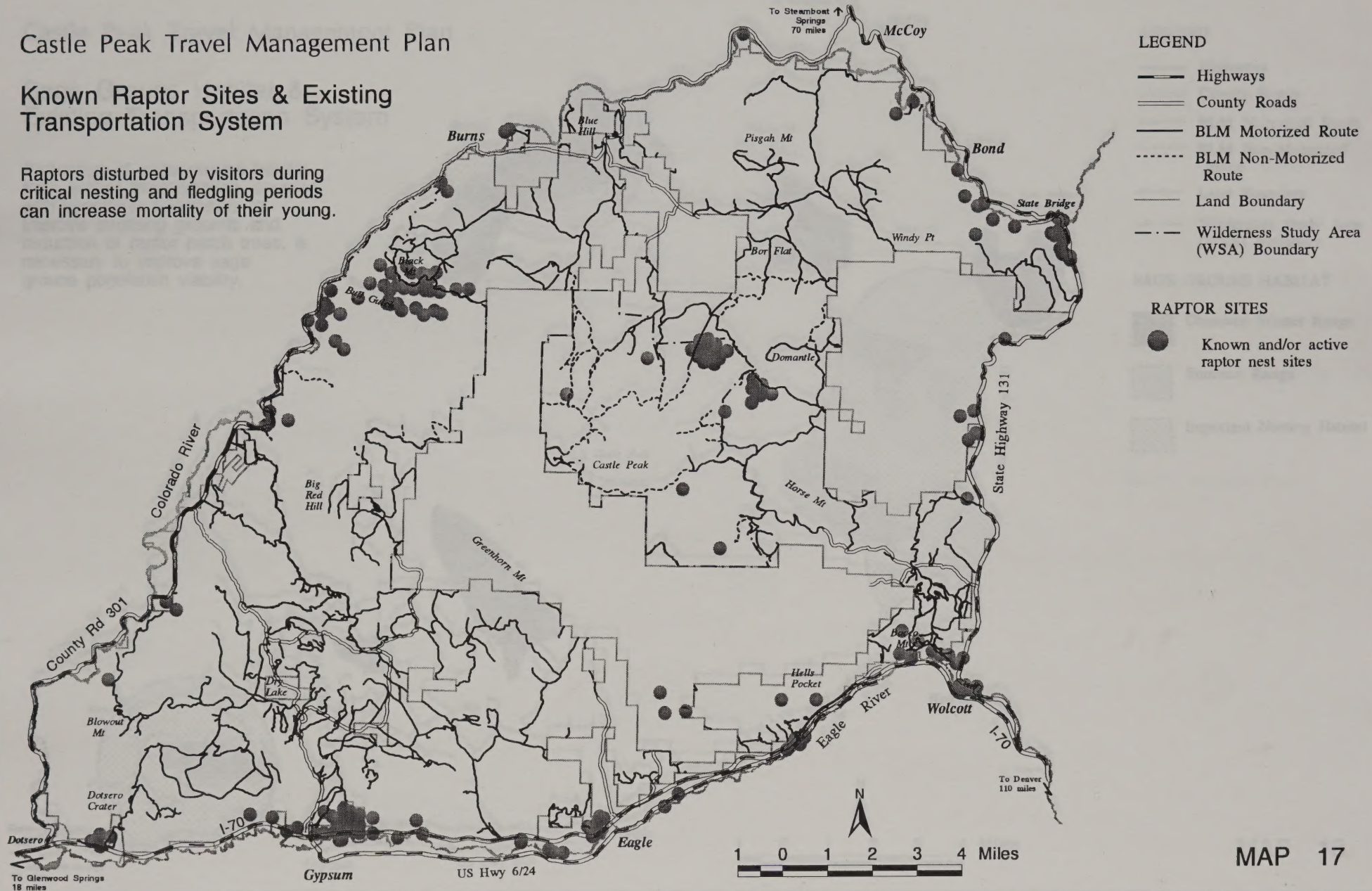
The relatively small area of bighorn sheep habitat is largely unaffected by the transportation system.



Castle Peak Travel Management Plan

Known Raptor Sites & Existing Transportation System

Raptors disturbed by visitors during critical nesting and fledgling periods can increase mortality of their young.



- Legend**
- boundary
 - road
 - railway
 - water
 - forest
 - settlement
 - other
- Notes**
- 1. The map shows the distribution of the population in the region.
 - 2. The population is concentrated in the urban areas.
 - 3. The rural population is scattered throughout the region.



The map shows the distribution of the population in the region. The population is concentrated in the urban areas. The rural population is scattered throughout the region.

Legend

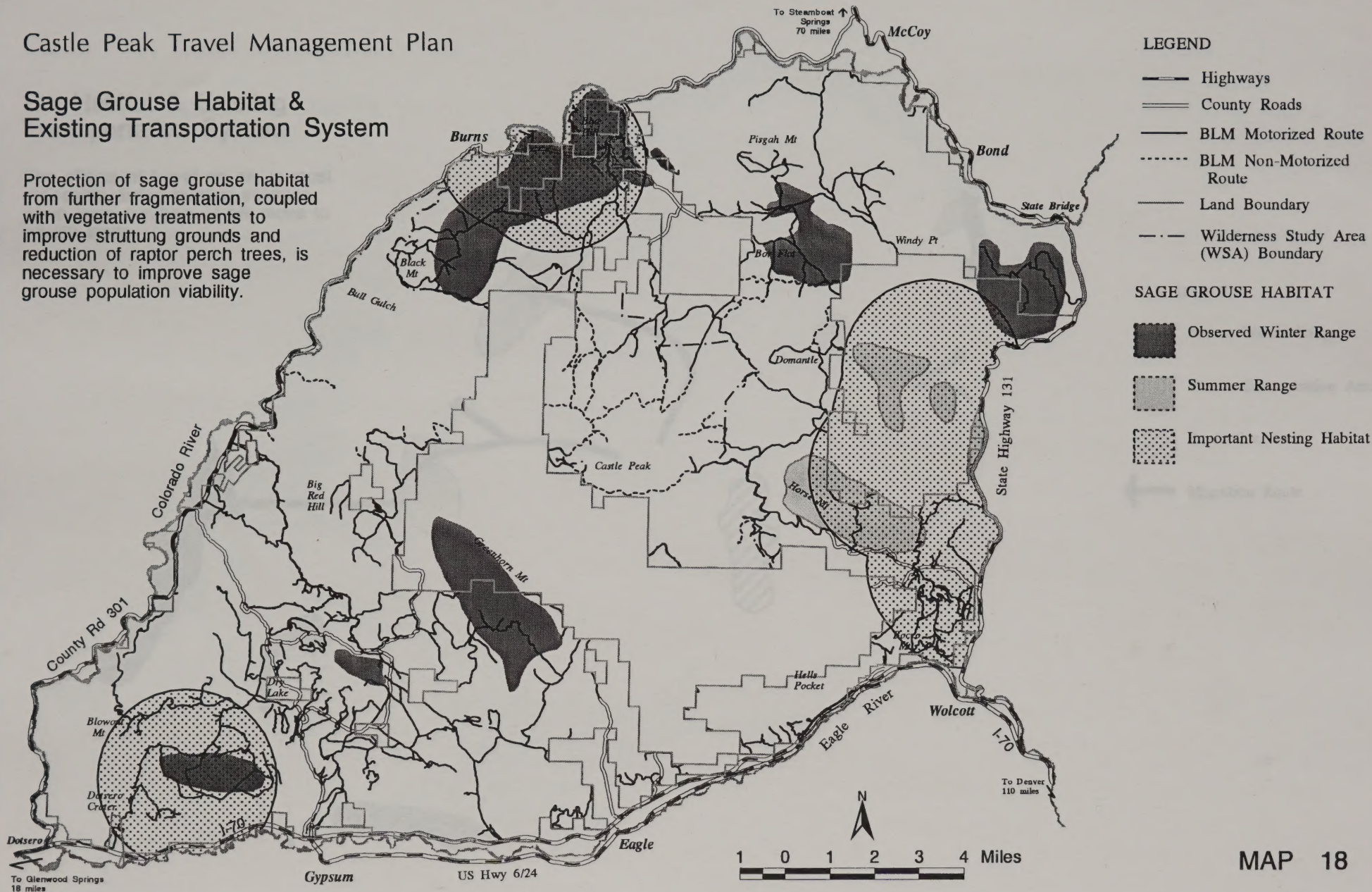
- boundary
- road
- railway
- water
- forest
- settlement
- other

Scale 1:100,000

Castle Peak Travel Management Plan

Sage Grouse Habitat & Existing Transportation System

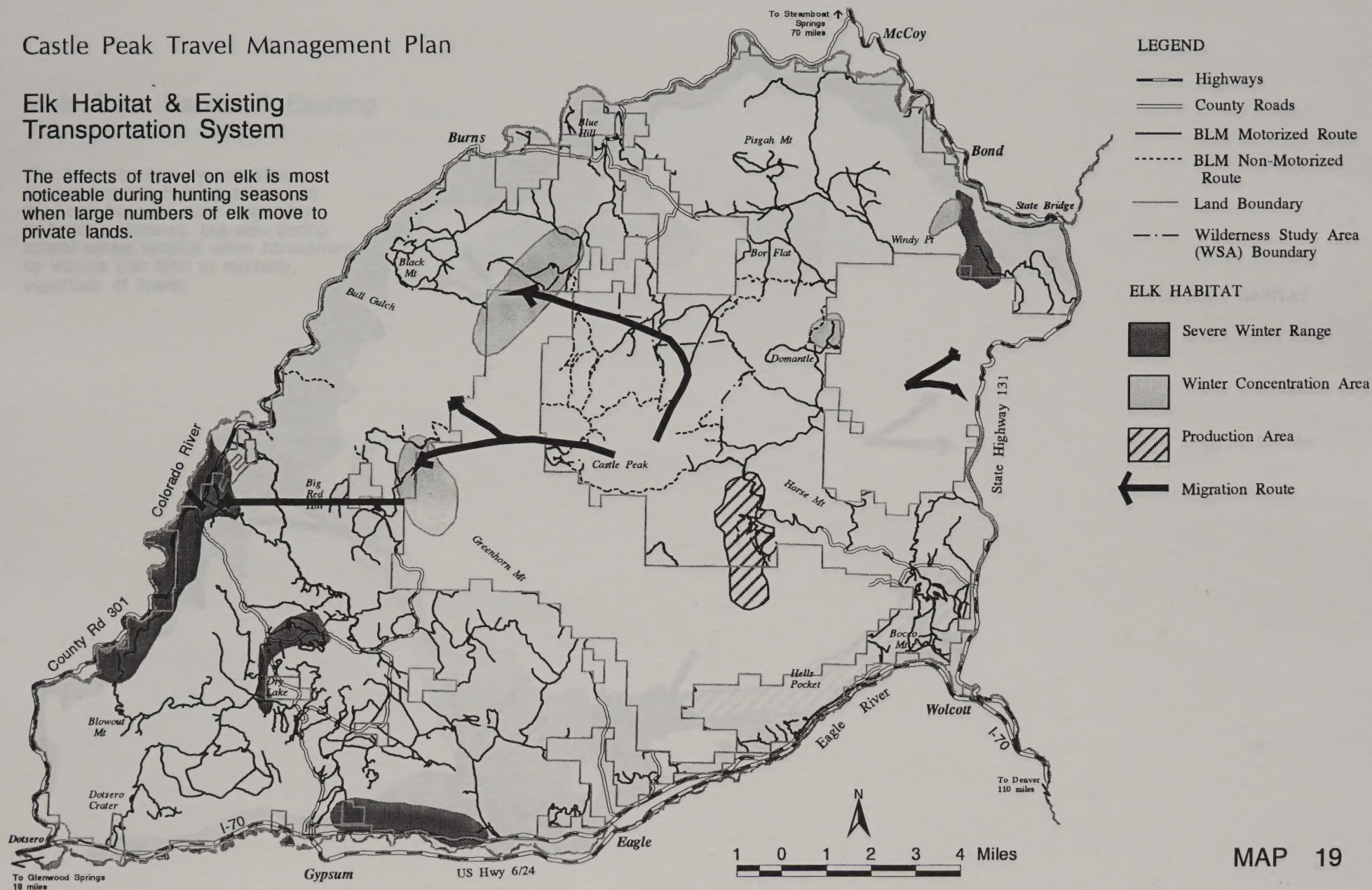
Protection of sage grouse habitat from further fragmentation, coupled with vegetative treatments to improve strutting grounds and reduction of raptor perch trees, is necessary to improve sage grouse population viability.



Castle Peak Travel Management Plan

Elk Habitat & Existing Transportation System

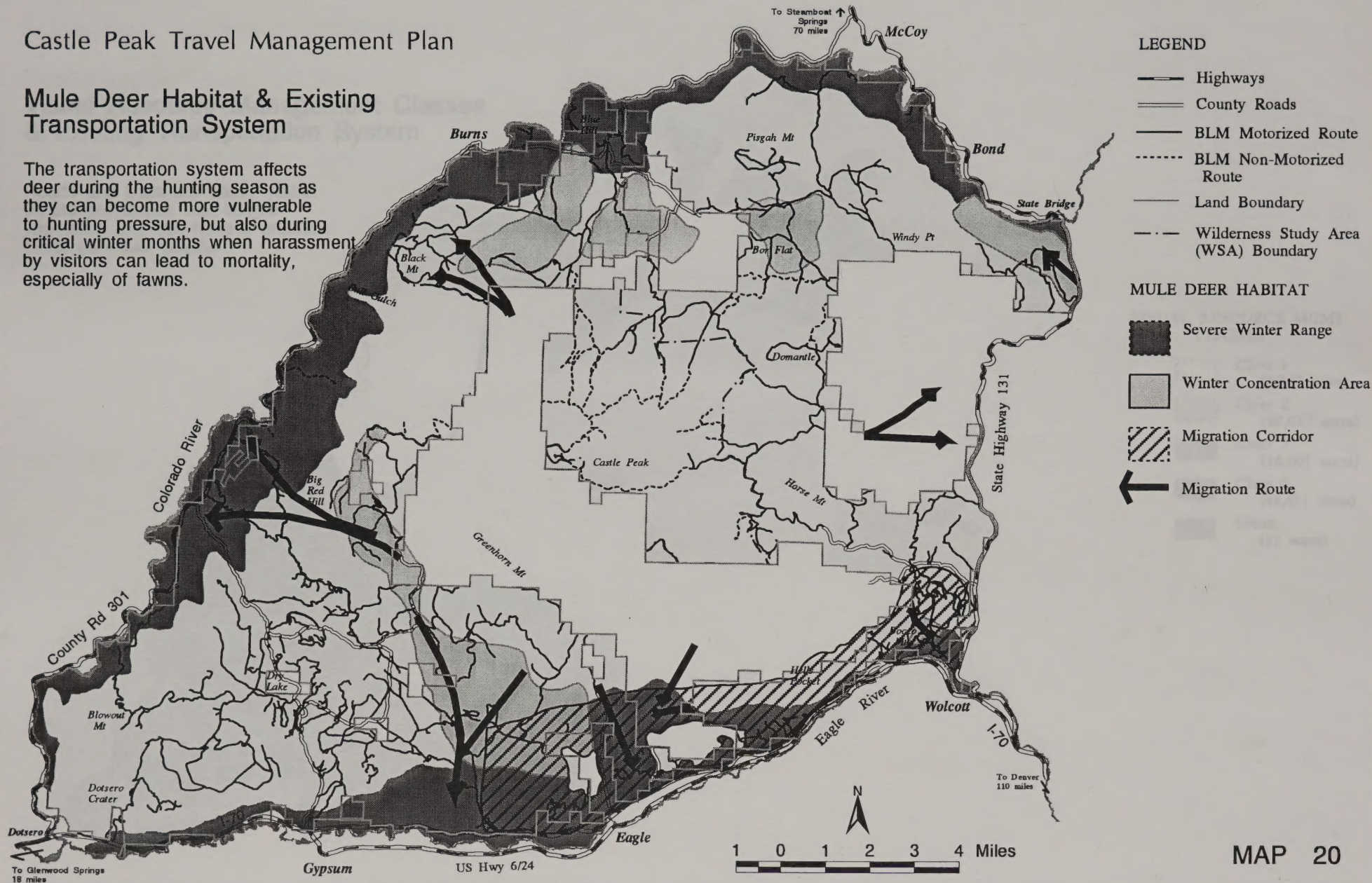
The effects of travel on elk is most noticeable during hunting seasons when large numbers of elk move to private lands.



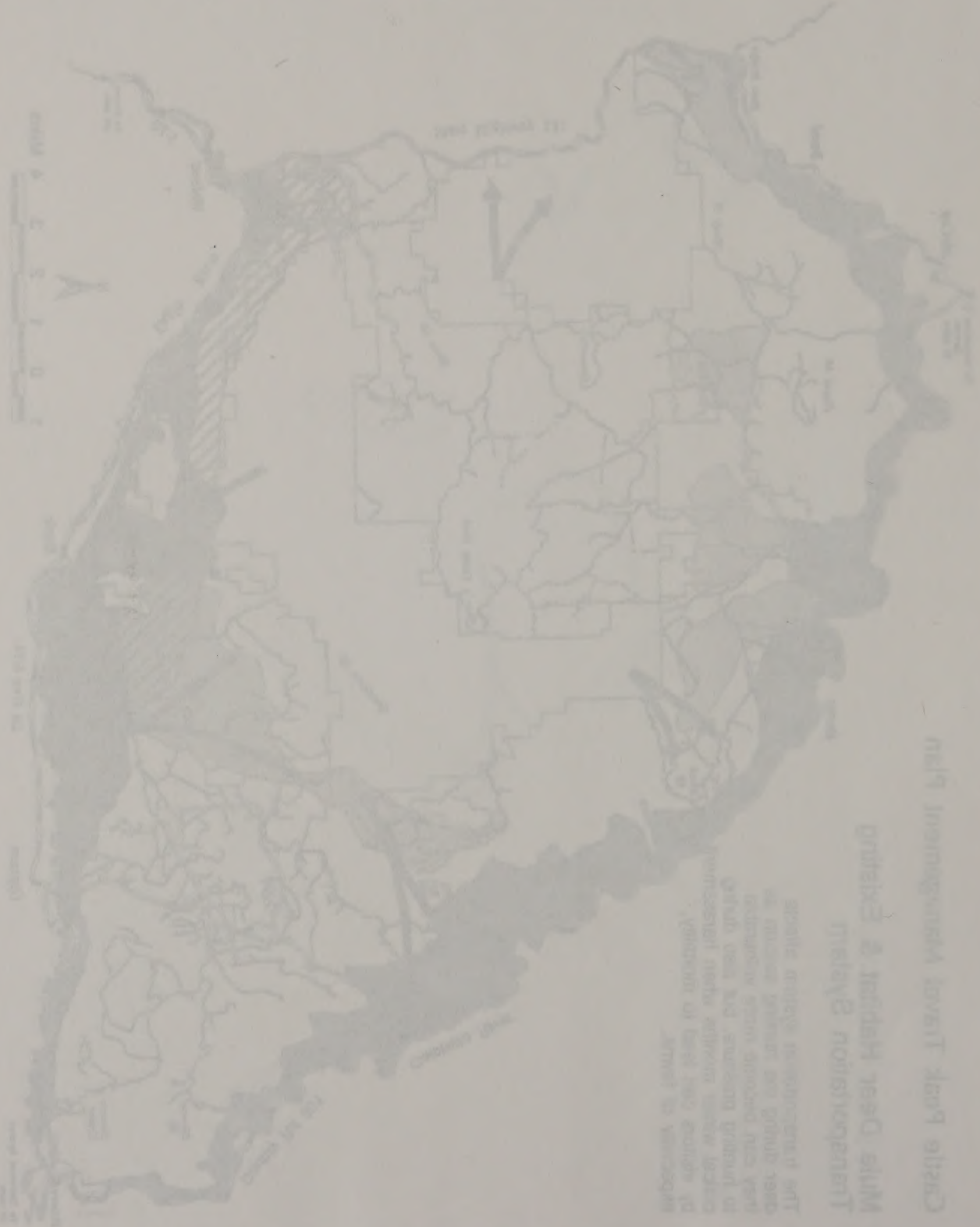
Castle Peak Travel Management Plan

Mule Deer Habitat & Existing Transportation System

The transportation system affects deer during the hunting season as they can become more vulnerable to hunting pressure, but also during critical winter months when harassment by visitors can lead to mortality, especially of fawns.



- LEGEND**
- boundary
 - road
 - railway
 - stream
 - canal
 - lake
 - forest
 - marsh
 - field
 - garden
 - orchard
 - vineyard
 - olive grove
 - citrus grove
 - date grove
 - palm grove
 - other grove
 - other land
 - other water
 - other



THESE ARE THE MAIN FEATURES OF THE REGION. THE MAP SHOWS THE BOUNDARIES OF THE COUNTRIES AND THE MAJOR CITIES. THE SHADING INDICATES THE DIFFERENT TYPES OF LAND USE. THE SCALE BAR AT THE TOP LEFT SHOWS THE DISTANCE IN KILOMETERS. THE NORTH ARROW AT THE TOP CENTER INDICATES THE DIRECTION OF NORTH.

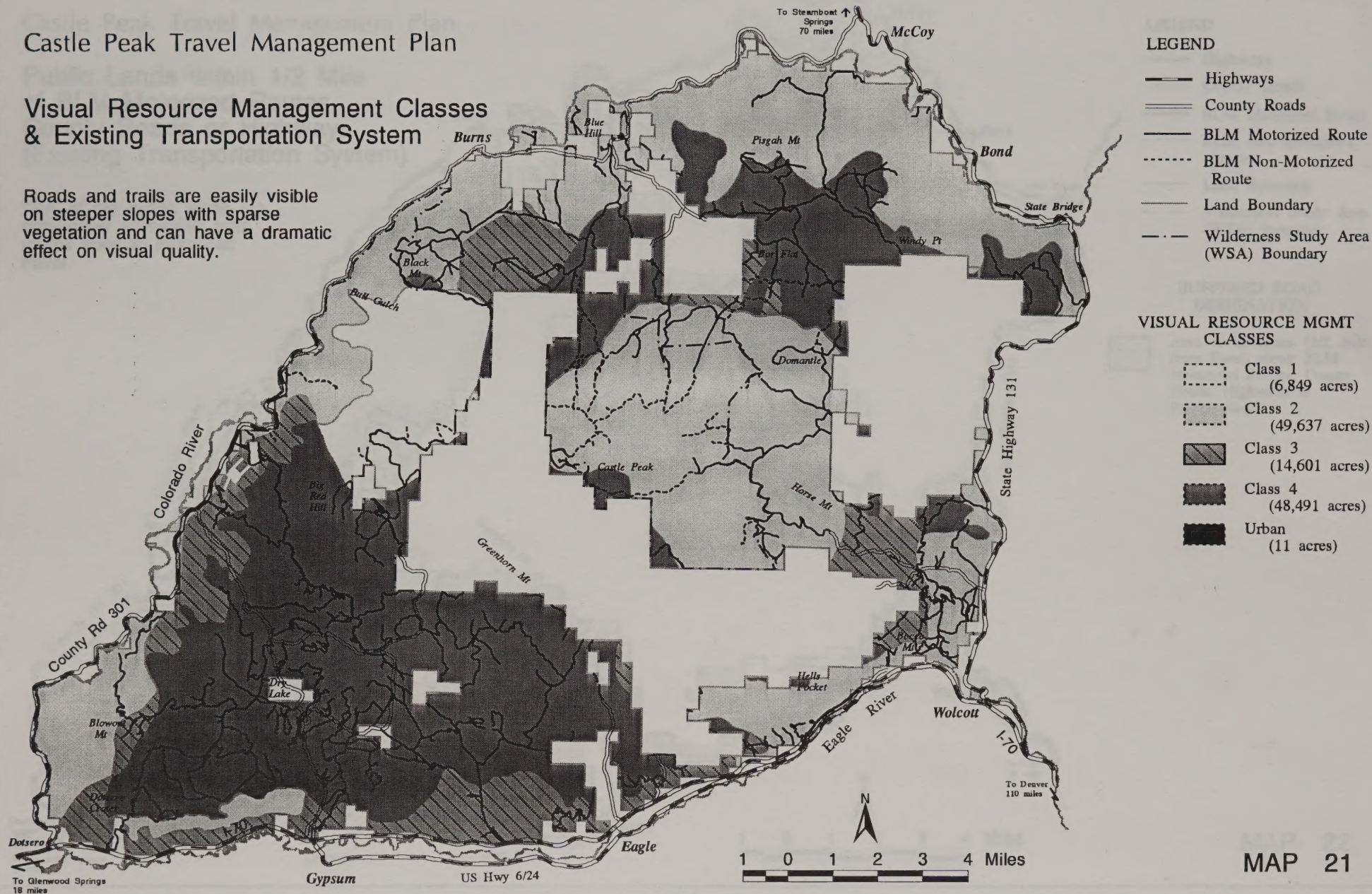
THESE ARE THE MAIN FEATURES OF THE REGION. THE MAP SHOWS THE BOUNDARIES OF THE COUNTRIES AND THE MAJOR CITIES. THE SHADING INDICATES THE DIFFERENT TYPES OF LAND USE. THE SCALE BAR AT THE TOP LEFT SHOWS THE DISTANCE IN KILOMETERS. THE NORTH ARROW AT THE TOP CENTER INDICATES THE DIRECTION OF NORTH.

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Castle Peak Travel Management Plan

Visual Resource Management Classes & Existing Transportation System

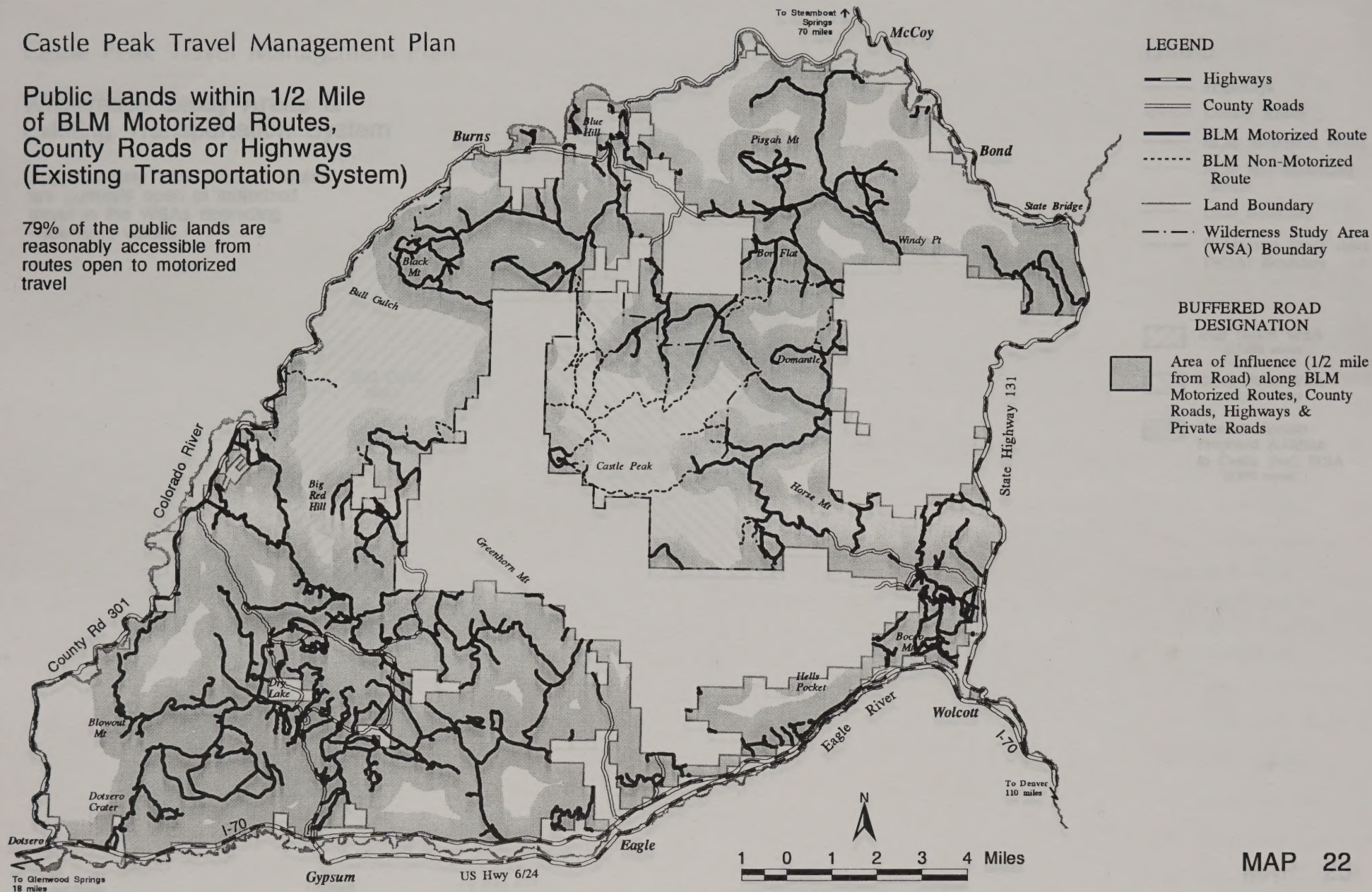
Roads and trails are easily visible on steeper slopes with sparse vegetation and can have a dramatic effect on visual quality.



Castle Peak Travel Management Plan

Public Lands within 1/2 Mile
of BLM Motorized Routes,
County Roads or Highways
(Existing Transportation System)

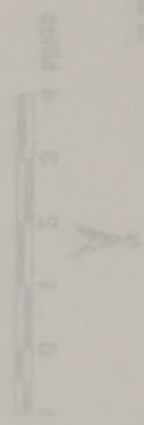
79% of the public lands are
reasonably accessible from
routes open to motorized
travel



DADA COUNTRY
MONTAGNARD

also see map of area
to the south of the
mountain range
to the north of the
mountain range
to the south of the
mountain range

- road (solid line)
- road (dashed line)
- road (dotted line)
- road (dash-dot line)
- road (long-dash line)
- road (short-dash line)
- road (thin solid line)
- road (thin dashed line)
- road (thin dotted line)
- road (thin dash-dot line)
- road (thin long-dash line)
- road (thin short-dash line)



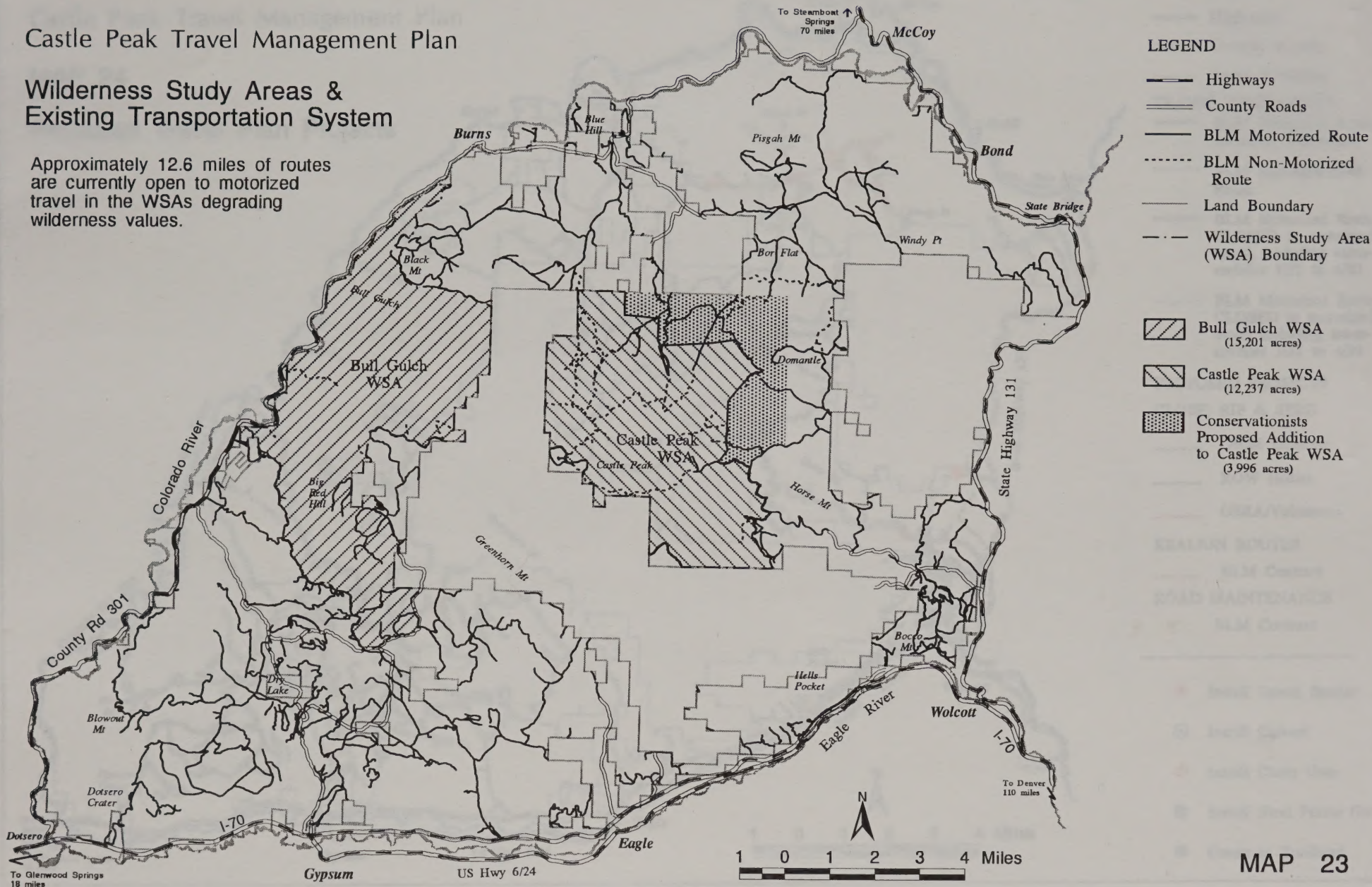
Public Lands within 100 miles
of the Highway
System
Public Lands within 100 miles
of the Highway
System

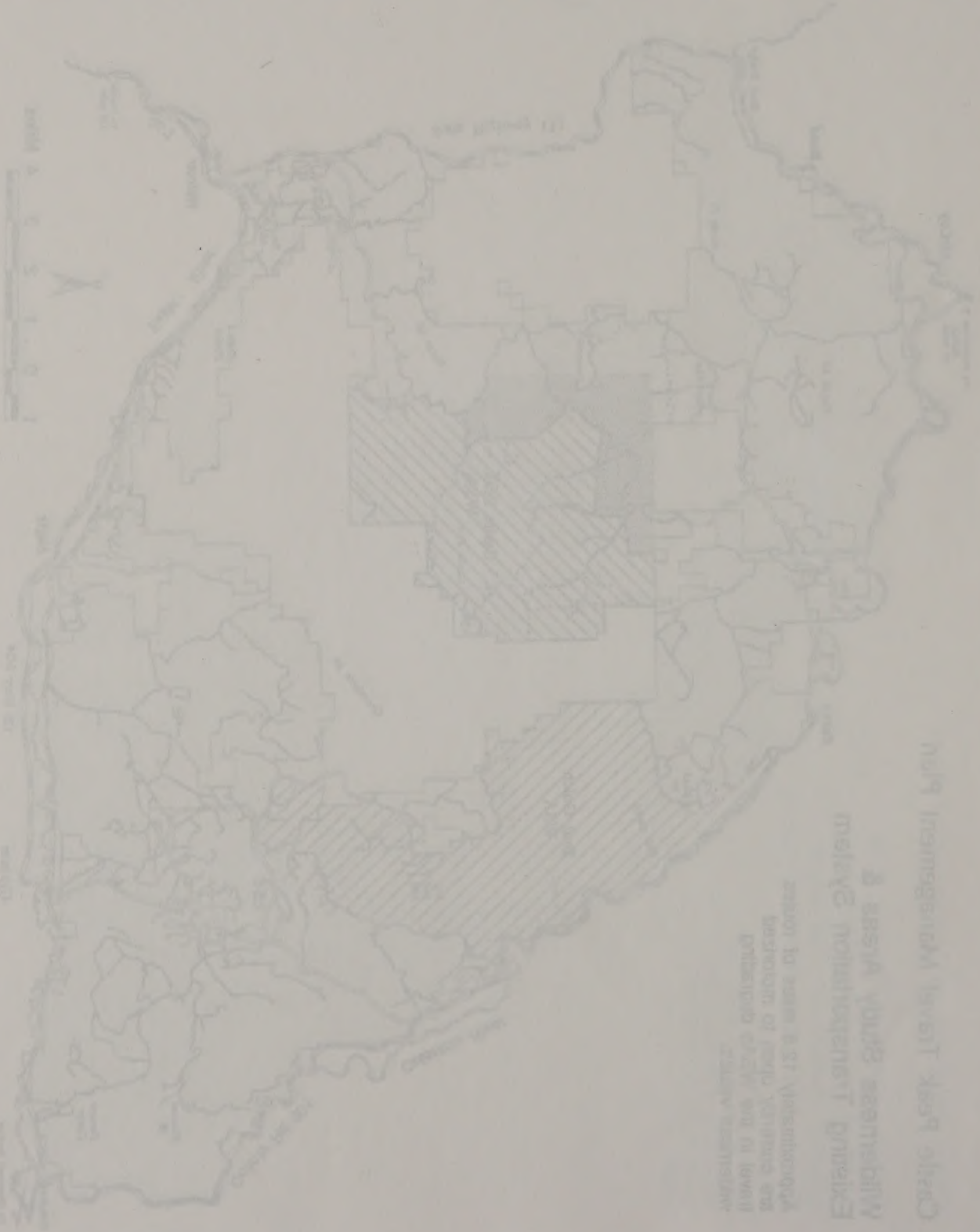
the road shown on the map
may not be the actual road
shown on the map

Castle Peak Travel Management Plan

Wilderness Study Areas & Existing Transportation System

Approximately 12.6 miles of routes are currently open to motorized travel in the WSAs degrading wilderness values.



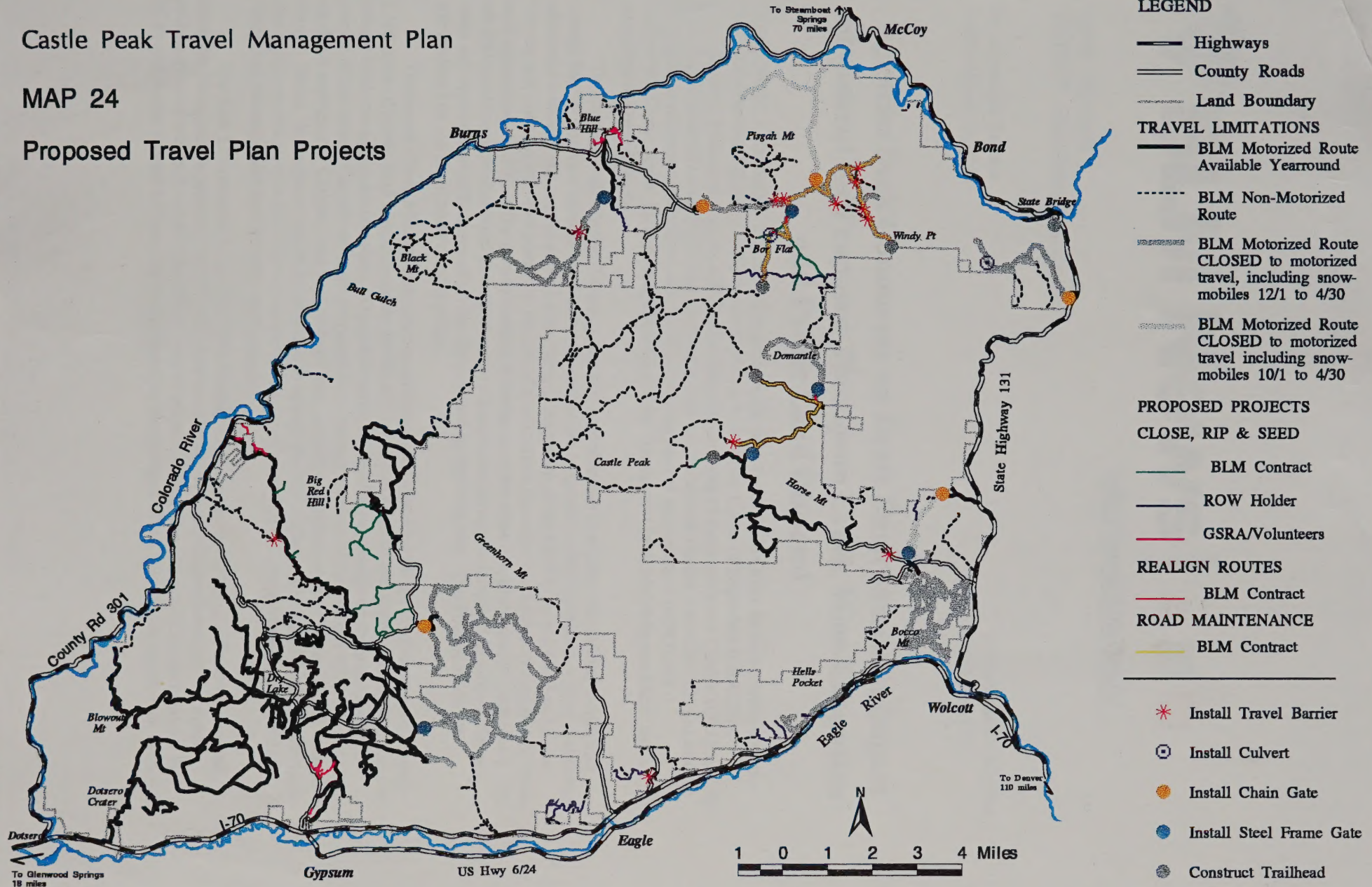


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Castle Peak Travel Management Plan

MAP 24

Proposed Travel Plan Projects



- Contour Interval
- △ Peak, 1000 Feet
- △ Peak, 2000 Feet
- △ Peak, 3000 Feet
- △ Peak, 4000 Feet
- △ Peak, 5000 Feet

- 1000 Feet
- 2000 Feet
- 3000 Feet
- 4000 Feet
- 5000 Feet
- 6000 Feet
- 7000 Feet
- 8000 Feet
- 9000 Feet
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- 80000 Feet
- 81000 Feet
- 82000 Feet
- 83000 Feet
- 84000 Feet
- 85000 Feet
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- 87000 Feet
- 88000 Feet
- 89000 Feet
- 90000 Feet
- 91000 Feet
- 92000 Feet
- 93000 Feet
- 94000 Feet
- 95000 Feet
- 96000 Feet
- 97000 Feet
- 98000 Feet
- 99000 Feet
- 100000 Feet



10000 Feet
 20000 Feet
 30000 Feet
 40000 Feet
 50000 Feet
 60000 Feet
 70000 Feet
 80000 Feet
 90000 Feet
 100000 Feet



BLM News



<http://www.blm.gov/id>

DATE: 03/21/2014

CONTACT: Sarah Wheeler, 208-524-7550

For Immediate Release
Friday, March 21, 2014

Contact: Sarah Wheeler
(208) 524-7550

Agencies Seek Comments on Draft Environmental Impact Statement for Proposed Thompson Creek Mine Expansion and Public Land Disposal

CHALLIS, ID – The Bureau of Land Management (BLM) Challis Field Office in cooperation with the U.S. Forest Service Salmon-Challis National Forest, U.S. Army Corps of Engineers (USACE) U.S. Environmental Protection Agency (EPA), the Idaho Department of Environmental Quality (DEQ) and the Idaho Department of Lands (IDL) has prepared a draft environmental impact statement (EIS) to analyze the potential environmental effects of a modified mining plan of operations (MMPO) and Section 404 Clean Water Act permit application for the Thompson Creek Molybdenum Mine, and a related public land disposal.

Thompson Creek Mining Company requests authorization to expand two existing waste rock storage facilities and the tailings impoundment, update the long-term water management plan, and disturb additional wetlands and waters of the United States. Approval of the MMPO by the BLM and Forest Service and issuance of a 404 permit by the USACE will allow the mine to continue mining molybdenum until approximately 2025. The current surface disturbance at the mine is approximately 2,800 acres. The MMPO would require additional permitted surface disturbance on approximately 350 acres of Federal lands and approximately 80 acres of private land owned by the company. The Federal lands are administered by the BLM and Forest Service.

Thompson Creek Mining Company has also proposed a land exchange involving approximately 5,100 acres of public land administered by the BLM Challis Field Office and approximately 900 acres of private lands owned by the company. The public land proposed for exchange contains the southern portion of the mine. The private lands proposed for exchange consists of the Broken Wing Ranch, six miles northeast of Clayton, and the Garden Creek property, 16 miles south of Pocatello in Bannock County, Idaho. In response, the BLM proposes to amend the 1999 Challis Resource Management Plan to identify the public land in the proposed exchange as suitable for disposal pursuant to the Federal Land Policy and Management Act of 1976, as amended.

The draft EIS contains a set of MMPO alternatives and a set of land disposal alternatives and identifies the agency's preferred MMPO alternative and preferred land disposal alternative. Public comments received on the draft EIS will be used to prepare a final EIS, which will be the basis for the BLM and Forest Service to issue decisions regarding the portions of the MMPO for which each agency

has jurisdiction, the USACE to issue a decision regarding a 404 permit for the mine, and the BLM to issue a decision regarding the amendment of the Challis Resource Management Plan and a decision regarding the related land disposal action. The EPA, Idaho DEQ, and IDL cooperated in the preparation of the draft EIS to ensure that the preferred MMPO alternative complies with the relevant laws, regulations and policies.

To ensure comments will be considered, the BLM must receive written comments on the draft EIS by June 18, 2014. Two public meetings have been scheduled at the following locations and times:

Challis Community Event Center May 13, 2014 6 p.m. to 8 p.m.

411 Clinic Road, Challis, Idaho

BLM Boise District Office May 14, 2014 6 p.m. to 8 p.m.

3948 Development Avenue, Boise, Idaho

You may submit comments or request your name be added to the project mailing list by any of these methods:

Email: BLM_ID_TCM_EIS@blm.gov;

Fax: 208.879.6210 (please reference "TCM EIS"); or

Mail: TCM EIS, Bureau of Land Management, Challis Field Office, 1151 Blue Mountain Road, Challis, Idaho 83226.

Copies of the draft EIS are available in the Challis Field Office at the address listed above from 7:45 a.m. to 4:30 p.m. Mountain Time, Monday through Friday, except Federal holidays. Copies of the DEIS are also be available online at http://www.blm.gov/id/st/en/prog/nepa_register/TCM-exlx_EIS.html.

Construction of the Thompson Creek Molybdenum Mine began in 1981. It has been producing molybdenum concentrate commercially since November 1983. Mining is currently authorized through approximately 2016 at the rate of approximately 30,000 tons of ore per day. The proposed expansion would allow production to continue to approximately 2025. Under the MMPO, mine production would continue to be approximately 30,000 tons per day of ore (15-20 million pounds of molybdenum per year).

For more information on this project, please contact Ken Gardner, Project Lead, BLM Challis Field Office, 1151 Blue Mountain Road, Challis, Idaho 83226, (208) 879-6210.

-BLM-



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Glenwood Springs Resource Area
50629 Highway 6 and 24
P.O. Box 1009
Glenwood Springs, Colorado 81602

9110
(7-880)

May 16, 1997

Dear Friend of Castle Peak,

Thank you for your continued interest and involvement in travel planning issues in the Glenwood Springs Resource Area. After three open house meetings, five public mailings, frequent field reviews, numerous stories in local papers, and extensive in-house analysis of public comments and resource data, the Castle Peak Travel Management Plan is ready for its last public review.

Why is the plan necessary?

A travel plan is necessary because more and more visitors are using the Castle Peak area. The current plan identifies a series of travel designations addressing motorized use restrictions that are more than 13 years old. The demands on our public lands have changed in that period; there are more visitors, more nearby residents, more local and nation-wide interest in recreation and more conflicts between visitors.

Damage to erosive soils, scenic views, wilderness values, sensitive watersheds and critical habitats is occurring in the Castle Peak area. There will continue to be legitimate debate as to the extent and significance of this damage. In some cases, like harassment of wildlife on winter range, this damage is subtle and difficult to measure. On the other hand, the increased occurrence of new roads and trails, often on erosive soils, is more apparent. The public lands in the Castle Peak area are fragile, but capable of supporting our varied demands if we make reasonable choices.

What are we trying to accomplish with this plan?

The enclosed flyer provides a summary of the travel plan. Some key components of the plan include the following:

- * Provide reasonable access to public lands for a variety of uses and protect erosive soils, wintering wildlife, scenic views, sensitive water quality management areas, cultural resources, and critical habitats.
- * Establish a system of designated roads (180 miles) and trails (140 miles) and restrict motorized travel to these designated routes. Snowmobiles will be allowed on and off roads except in Wilderness Study Areas (WSA) and areas with winter closure. Mountain bikes can be used on all motorized routes and on all non-motorized travel routes, except in the WSAs. Cross-country bicycle travel is not allowed.
- * Provide enhanced motorized recreation opportunities for 4x4 driving, trail riding and hill climbing. Designate the Bocco Mountain area north of Wolcott and the Gypsum Hills area north of Gypsum as Special Recreation Management Areas (SRMA). Designate most of the existing roads and trails in the SRMAs for motorized use.
- * Provide a range of motorized recreation opportunities for visitors to the Castle Peak area. About 62% of the public lands in the planning area will be within 1/2 mile or less of a route open to motorized vehicles.
- * Manage about 25% of the planning area (Castle Peak, Bull Gulch and Pisgah Mountain) for semi-primitive non-motorized recreation opportunities.

* Protect critical wildlife habitats and reduce road damage during wet seasons by restricting travel on about 72 miles of routes during the winter (December 1 through April 30). Provide sufficient public access to meet Colorado Division of Wildlife harvest goals by delaying implementation of the winter closure to coincide with the end of late season elk hunts in January.

* Improve big game hunting success by restricting motorized travel on about 7 miles of roads during the rifle hunting seasons (October 1 through November 30). Reduce hunting pressure on big game in these areas and keep deer and elk on public lands longer.

* Protect wilderness values consistent with the BLM's Interim Wilderness Management Policy by closing the Bull Gulch and Castle Peak WSAs to all motorized travel including snowmobiles, and mechanized uses, including mountain bicycles.

How will BLM enforce the new travel rules?

Many of you expressed concern about our ability to enforce new travel rules. I believe this travel plan provides clear, reasonable rules that offer a range of recreation opportunities. Together with more informative maps, an improved route marker system and an increased BLM presence we should have the framework to be successful in enforcing the travel plan. I know this can work if visitors to Castle Peak share a commitment to finding a balance between using these special lands and protecting them. Additionally, Castle Peak will be designated as a Public Land Watch area and you can help promote compliance with the rules by documenting violations you see and problems you encounter.

What is the deadline for commenting on the travel plan?

The plan and EA are the result of a planning process initiated in March of 1996. My goal was to provide abundant opportunities for the public to learn, participate, and influence the outcome of the planning effort. Your comments have been insightful and informative and led to the development of the alternatives as well as the latest revisions to the final plan. This round of comments is designed to fine tune the plan and bring this process to a close. The deadline for submitting written comments on the final plan is June 23, 1997.

Should you desire more detailed information, copies of the plan and environmental assessment (EA) are available for review at the BLM office in Glenwood Springs, Forest Service offices in Minturn and Eagle, and the Eagle Visitor Center. If you want more information, or have questions about the plan, please contact Jim Byers at (970) 947-2800.

What's next?

After reviewing and considering your comments we will make necessary changes to the plan. I hope to announce the availability of the decision record in July of 1997, which will be followed by a 30 day protest and appeal period. Depending on the scope of protest and appeals, I hope to begin implementation shortly thereafter.

So far, thanks to you, this process has been constructive and informative. Public acceptance of travel management regulations is essential to the on-the-ground success of any plan and I'm hopeful we have established some level of acceptance. Thanks again for your continued involvement.

Sincerely,

Michael S. Mottice

Michael S. Mottice
Area Manager

Getting Around in the
Castle Peak Area
Today and Tomorrow...

Travel Management Plan

This flyer summarizes the final travel management plan for public lands administered by the Bureau of Land Management (BLM) in the Castle Peak area near the towns of Eagle, Gypsum, Wolcott, Bond, McCoy, Burns and Dotsero. The planning area includes approximately 119,631 acres of BLM land.

Castle Peak Today and Tomorrow

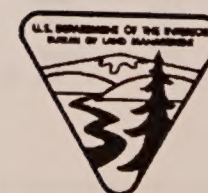
Today, public land in the Castle Peak area is used for livestock grazing, hiking, hunting, fishing, OHV riding, sightseeing, camping, horseback riding, snowshoeing, cross country skiing, and snowmobiling. At the same time, this landscape provides scenic views, water, clean air, and wildlife habitats in a variety of settings. Today, except for a small portion of the Wilderness Study Areas, the entire Castle Peak planning area is open year round to motorized travel. The current transportation plan is inadequate, and there are few restrictions to protect erosive soils, wintering wildlife, important views, sensitive water quality management areas, cultural resources or special habitats. Currently roads are damaged during wet conditions, hunting pressure drives deer and elk off public lands and conflicts between different users are occurring. Tomorrow, the Castle Peak Travel Management Plan will provide a better transportation system and more effectively balance our increasing demands to use and enjoy these lands with reasonable measures to protect the sensitive components of this landscape.

**TO SUBMIT COMMENTS OR
FOR FURTHER INFORMATION CONTACT:**

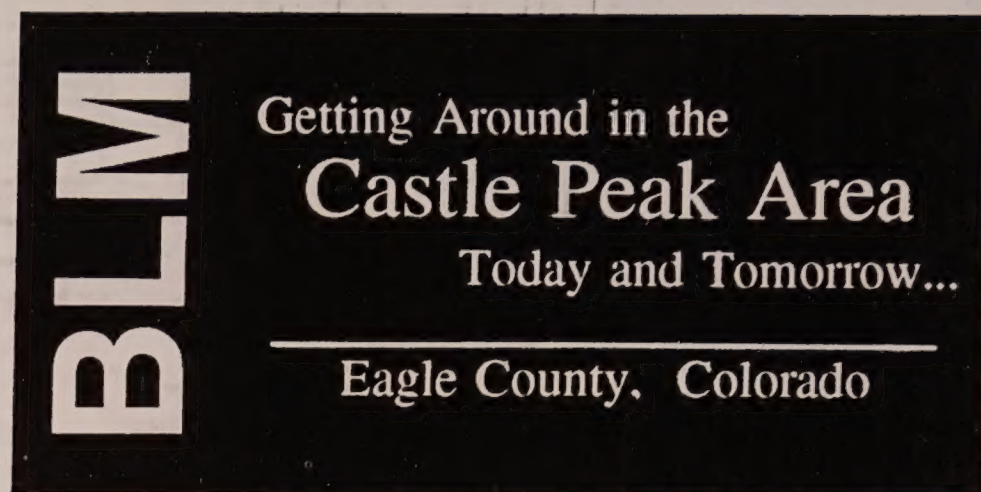
**Bureau of Land Management
50629 Highway 6 & 24; P.O. Box 1009
Glenwood Springs, CO 81602
(970) 947-2800
FAX (970) 947-2829
TDD (970) 947-2837**

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GLENWOOD SPRINGS RESOURCE AREA
50629 Highway 6 and 24
P.O. Box 1009
Glenwood Springs, CO 81602**

**OFFICIAL BUSINESS
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Department of the Interior
Bureau of Land Management
Glenwood Springs Resource Area
(5/97)



Final Travel Management Plan

May 1997

Castle Peak Area

Final Travel Management Plan

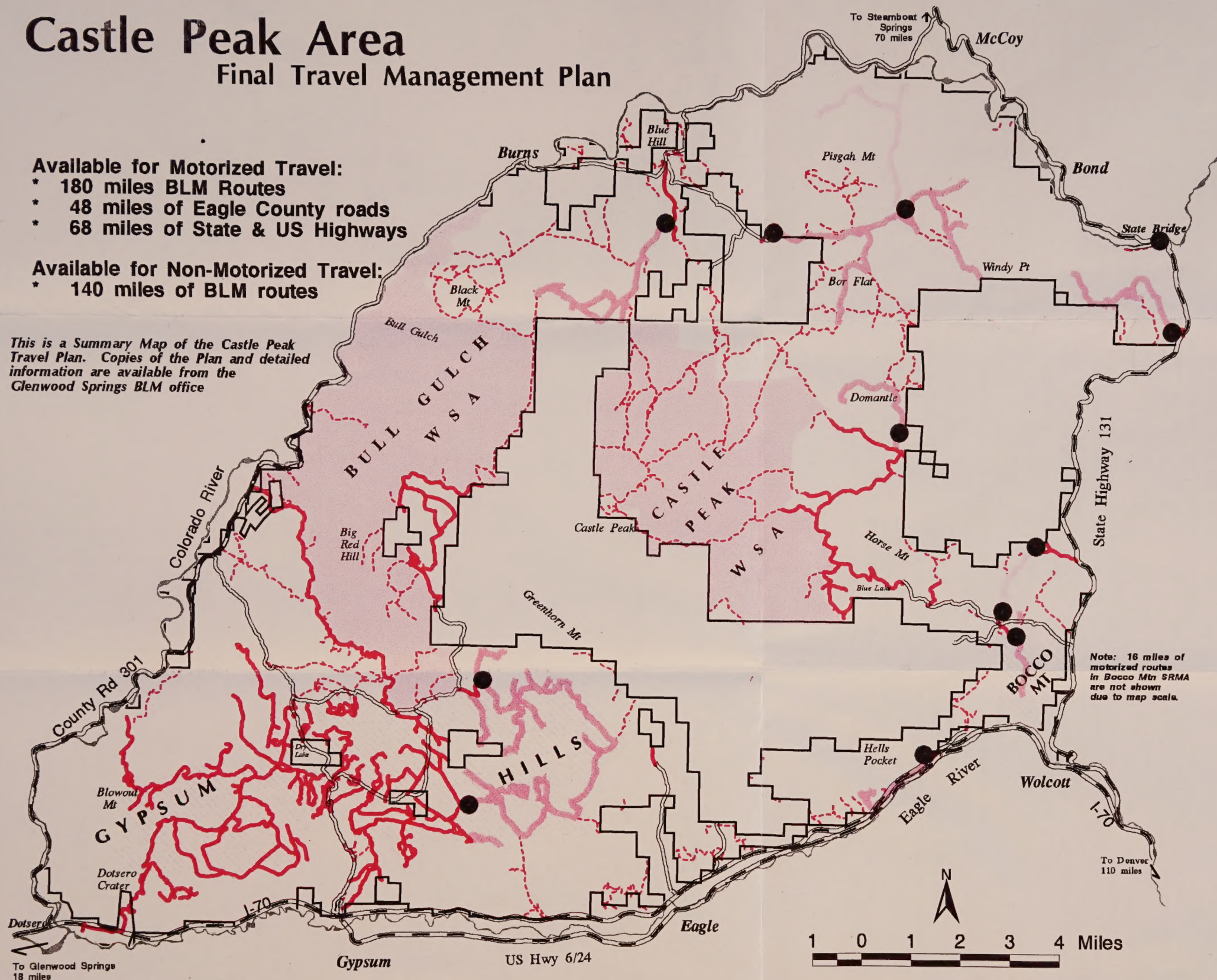
Available for Motorized Travel:

- * 180 miles BLM Routes
- * 48 miles of Eagle County roads
- * 68 miles of State & US Highways

Available for Non-Motorized Travel:

- * 140 miles of BLM routes

This is a Summary Map of the Castle Peak Travel Plan. Copies of the Plan and detailed information are available from the Glenwood Springs BLM office



LEGEND

- Land Boundary
- == Highways
- === County Roads

TRAVEL DESIGNATIONS

All motorized and mechanized travel on public lands is LIMITED TO DESIGNATED ROUTES year-round unless otherwise noted.

- BLM Motorized Route Available Year-round
- - - BLM Non-Motorized Route
- BLM Motorized Route CLOSED to motorized travel, including snowmobiles 12/1 to 4/30
- BLM Motorized Route CLOSED to motorized travel including snowmobiles 10/1 to 4/30
- Seasonal Closure Point

CLOSED AREA.
Motorized & Mechanized Travel prohibited year-round including snowmobiles

SPECIAL RECREATION MANAGEMENT AREA.
Managed for enhanced motorized recreation including Jeeping, Motocross and/or Trail Riding for Off Highway Vehicles. All motorized travel is restricted to designated routes.

Note: 16 miles of motorized routes in Bocco Mtn SRMA are not shown due to map scale.

1 0 1 2 3 4 Miles

Final Travel Management Plan

May 1997

What Changed From the Proposed Plan?

Nearly 100 people submitted comments on the September, 1996 Proposed Travel Management Plan. The final plan described in this flyer reflects changes or revisions made in response to those comments, including:

1. Designating more existing roads as motorized routes in the Gypsum Hills Area.
2. Implementing seasonal travel restrictions in the north Castle Peak area instead of developing a new public access road.
3. Maintaining motorized access on the existing motorized route east of Posey Spring.
4. Adjusting the seasonal travel restrictions to protect special wildlife habitats, to reduce pressure on big game during the hunting season so deer and elk stay on public lands longer, and to minimize damage to roads during wet seasons.
5. Designating Special Recreation Management Areas in the Bocco Mountain and Gypsum Hills areas to maintain or enhance opportunities for driving 4X4 vehicles, ATVs or motorcycles in a variety of terrains.

What are the Goals of the Plan?

To protect the land and resource values on BLM land while continuing to provide access for a variety of recreational opportunities and to reduce conflicts among the various users of public land.

How Does the Final Plan Affect Public Land Visitors?

●Summer Motorized Access and Travel:

Visitors will have motorized access on 180 miles of designated routes (see map). Cross country motorized travel will be prohibited throughout the area. Approximately 63% of the public lands will be within 1/2 mile of a motorized route and readily accessible. Public lands accessible only by roads across private land without public access, will be closed to vehicle use. This plan does not affect motorized use on 48 miles of county roads and 68 miles of state and federal highways.

●Hunting Season and Fall Travel Restrictions:

During the deer and elk hunting season, 173 miles of motorized routes will be available. Motorized vehicle access will be available to most areas but access to some camp spots will be lost. Seven miles of summer routes will be closed from Oct. 1 through April 30th. The Stagecoach Trail near Pisgah Mountain will be closed to provide non-motorized hunting opportunities and the powerline trail over Horse Mountain will be closed to vehicle use to prevent road damage during the wet months of the year. These routes will be open for non-motorized travel.

●Winter Travel Restrictions:

Certain areas will be closed to motorized travel, including snowmobiles, between December 1 and April 30 to protect wintering deer and elk and to reduce road damage during the wet season. Approximately 108 miles of routes will open to motor vehicles during these winter months. Winter closures will be delayed to provide vehicle access during the late elk hunting season. Routes closed to vehicle use in the winter will continue to be open for skiing, snowshoeing and other non-motorized activities.

●Special Recreation Management Areas:

Opportunities for operating 4X4s, ATVs and motorcycles, including trail riding, moto-cross track riding and hill climbing, will be provided in a managed setting on 18,326 acres in the Bocco Mountain and Gypsum Hills areas. These Special Recreation Management Areas will be managed to enhance motorized opportunities on a designated system of routes and trails for a variety of challenges and skill levels. New routes could be approved as part of the designated system if necessary to compliment existing routes. These Special Recreation Management Areas will be cooperatively managed with users to accommodate present and future demand, to mitigate impacts and user conflicts, and to provide adequate facilities and maintenance. Of course, ATVs, 4X4s, and motorcycles may continue to use all other routes

designated for motorized travel consistent with seasonal restrictions, and county and state regulations.

●Non -Motorized Recreation:

Opportunities for hiking, horseback riding and cross country skiing will be available on 140 miles of non-motorized routes. Of course, such uses are also permitted throughout the planning area on and off trails as well as on those routes designated for motorized travel.

●Wilderness Study Areas:

Wilderness values will be protected by prohibiting motorized travel and the use of mechanized travel, including mountain bikes. This is consistent with BLM's interim wilderness management policy for WSAs. The 13 miles of existing vehicle tracks will be obliterated and reclaimed to near natural conditions, though portions of some routes may be maintained for non-motorized use.

●Mountain Biking:

Bicyclists can travel on all motorized travel routes and on all non-motorized travel routes, except in the WSAs. Cross country travel is not allowed.

●Snowmobiling:

Use of snowmobiles will be allowed on and off roads except within WSAs, and areas under winter closure, to preserve wilderness values and protect wintering wildlife. The Milk Creek Basin will continue to be the most suitable area for snowmobiling due to generally adequate snow levels and more moderate terrain.

How and When Will the Plan be Implemented?

●Implementation:

New travel regulations will be published by Fall 1997. Signs and route markers will be installed starting this summer. The BLM will increase patrols to help promote awareness of the new regulations and to assist visitors with any questions.

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